20. **Leak Detection and Repair ("LDAR") Program Enhancements**:

In order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from equipment in light liquid and/or in gas/vapor service, MAP shall undertake at each of its Refineries the enhancements at Paragraph 20.A through Paragraph 20.P to each Refinery's LDAR program under Title 40 of the Code of Federal Regulations, Part 60, Subpart GGG; Part 61, Subparts J and V; Part 63, Subparts F, H, and CC; and applicable state LDAR requirements. The terms "equipment," "in light liquid service" and "in gas/vapor service" shall have the definitions set forth in the applicable provisions of Title 40 of the Code of Federal Regulations, Part 60, Subpart GGG; Part 61, Subparts J and V; Part 63, Subparts F, H and CC; and applicable state LDAR regulations.

A. **Written Refinery-Wide LDAR Program**. By no later than 120 days after the Date of Lodging of the August 2001 Consent Decree, MAP shall develop and maintain, for each of its Refineries, a written, Refinery-wide program for compliance with all applicable federal and state LDAR regulations. Until termination of the First Revised Consent Decree, MAP shall implement this program on a Refinery-wide basis, and MAP shall update each Refinery's program as necessary to ensure continuing compliance. Each Refinery-wide program shall include at a minimum:

i. An overall, Refinery-wide leak rate goal that will be a target for achievement on a process-unit-by-process-unit basis;

ii. An identification of all equipment in light liquid and/or in gas/vapor service that has the potential to leak VOCs, HAPs, VHAPs, and benzene within process units that are owned and maintained by each Refinery;

iii. Procedures for identifying leaking equipment within process units that are owned and maintained by each Refinery;

iv. Procedures for repairing and keeping track of leaking equipment;

v. Procedures for identifying and including in the LDAR program new equipment; and

vi. A process for evaluating new and replacement equipment to promote consideration and installation of equipment that will minimize leaks and/or eliminate chronic leakers.

B. **Training.** By no later than one year from the Date of Lodging of the August 2001 Consent Decree, MAP shall implement the following training programs at each of its Refineries:

i. For personnel newly-assigned to LDAR responsibilities, MAP shall require LDAR training prior to each employee beginning such work;

ii. For all personnel assigned LDAR responsibilities, MAP shall provide and require completion of annual LDAR training; and

iii. For all other Refinery operations and maintenance personnel (including contract personnel), MAP shall provide and require completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties. Until termination of this First Revised Consent Decree, "refresher" training in LDAR shall be performed on a three year cycle.

C. **LDAR Audits**. Commencing upon the Date of Lodging of the August 2001 Consent Decree, MAP shall implement at each of its Refineries, the Refinery-wide audits set forth in Paragraphs 20.C.i. and 20.C.ii., to ensure each Refinery's compliance with all applicable LDAR requirements. MAP's LDAR audits shall include but not be limited to, comparative monitoring, records review, tagging, data management, and observation of the LDAR technicians' calibration and monitoring techniques.

i. Third-Party Audits. MAP shall retain a contractor(s) to perform a third-party audit of each Refinery's LDAR program at least once every four years. The first third-party audit for three of MAP's seven Refineries shall be completed no later than one year from the Date of Lodging of the August 2001 Consent Decree. The audits of MAP's remaining Refineries shall be completed within two years from the Date of Lodging of the August 2001 Consent Decree.

ii. Internal Audits. MAP shall conduct internal audits of each Refinery's LDAR program by sending personnel familiar with the LDAR program and its requirements from one or more of MAP's other Refineries or locations to audit another MAP Refinery. MAP shall complete the

first round of these internal LDAR audits by no later than two years from the date of the completion of the third-party audits required in Paragraph 20.C.i. Internal audits of each Refinery shall be held every four years thereafter for the life of this First Revised Consent Decree.

iii. To ensure that an audit at each Refinery occurs every two years, third-party and internal audits shall be separated by two years.

iv. Alternative. As an alternative to the internal audits required by Paragraph 20.C.ii., MAP may elect to retain third-parties to undertake these audits, provided that an audit of each Refinery occurs every two (2) years.

D. **Implementation of Actions Necessary to Correct Non-Compliance**.

If the results of any of the audits conducted pursuant to Paragraph 20.C at any of MAP's Refineries identify any areas of non-compliance, MAP shall implement, as soon as practicable, all steps necessary to correct the area(s) of non-compliance, and to prevent, to the extent practicable, a recurrence of the cause of the non-compliance. Until termination of the First Revised Consent Decree, MAP shall retain the audit reports generated pursuant to Paragraphs 20.C.i. and 20.C.ii. and shall maintain a written record of the corrective actions that MAP takes at each of its Refineries in response to any deficiencies identified in any audits. In the Progress Report submitted pursuant to the provisions of Section VIII of this First Revised Consent Decree (Recordkeeping and Reporting) on January 31 of each year, MAP shall submit the audit reports and corrective action records for audits performed and actions taken during the previous year.

E. **Internal Leak Definition for Valves and Pumps.**

MAP shall utilize the following internal leak definitions for valves and pumps in light liquid and/or gas/vapor service, unless other permit(s), regulations, or laws require the use of lower leak definitions.

i. Leak Definition for Valves.

a. Except as expressly provided in Paragraph 20.E.i.b., by no later than two years after the Date of Lodging of the August 2001 Consent Decree, MAP shall utilize an internal leak definition of 500 ppm VOCs for all of its Refineries' valves, excluding pressure relief devices.

b. For the Catlettsburg Refinery, MAP shall utilize an internal leak definition of 500 ppm for the valves on the #5 Crude Unit and the Sat Gas Plant by no later than eighteen (18) months after the Date of Lodging of the August 2001 Consent Decree, and shall utilize an internal leak definition of 500 ppm for the valves on the FCCU Units 1 and 109 and the #4 Vacuum Units by no later than thirty-two (32) months after the Date of Lodging of the August 2001 Consent Decree.

ii. Leak Definition for Pumps. MAP shall utilize an internal leak definition of 2000 ppm for its Refineries' pumps by the following dates:

a. By no later than eighteen (18) months after the Date of Lodging of the August 2001 Consent Decree, MAP shall utilize this definition for 50% of the total number of pumps that MAP has at all of its Refineries combined;

b. By no later than twenty-four (24) months after the Date of Lodging of the August 2001 Consent Decree, MAP shall utilize this definition for 85% of the total number of pumps that MAP has at all of its Refineries combined;

c. By no later than forty (40) months after the Date of Lodging of the August 2001 Consent Decree, MAP shall utilize this definition for all of the pumps at all of its Refineries.

F. **Reporting, Recording, Tracking, Repairing and Remonitoring Leaks of Valves and Pumps Based on the Internal Leak Definitions**.

i. Reporting. For regulatory reporting purposes, MAP may continue to report leak rates in valves and pumps against the applicable regulatory leak definition, or may use the lower, internal leak definitions specified in Paragraph 20.E.

ii. Recording, Tracking, Repairing and Remonitoring Leaks. MAP shall record, track, repair and remonitor all leaks in excess of the internal leak definitions of Paragraphs 20.E.i. and

20.E.ii. (at such time as those definitions become applicable), except that MAP shall have thirty (30) days to make repairs and remonitor leaks that are greater than the internal leak definitions but less than the applicable regulatory leak definitions.

G. **First Attempt at Repairs on Valves.** Beginning no later than ninety (90) days after the Date of Lodging of the August 2001 Consent Decree, MAP shall make a "first attempt" at repair on any valve that has a reading greater than 200 ppm of VOCs excluding control valves, pumps, and components that LDAR personnel are not authorized to repair. MAP or its designated contractor, however, shall remonitor, by no later than the end of the next calendar day, all valves that LDAR personnel attempted to repair. Unless the remonitored leak rate is greater than the applicable leak definition, no further action will be necessary. If, after two years, MAP can demonstrate with sufficient monitoring data that the "first attempt" repair at 200 ppm will worsen or not improve the Refinery's leak rates, MAP may request that EPA reconsider or amend this requirement.

H. **LDAR Monitoring Frequency.**

i. Pumps. When the lower leak definition for pumps becomes applicable pursuant to Paragraph 20.E.ii, MAP shall monitor pumps at the lower leak definition on a monthly basis.

ii. Valves. By no later than two years after the Date of Lodging of the August 2001 Consent Decree, MAP shall implement a program to monitor valves more frequently than is required by applicable regulations by monitoring valves -- other than difficult to monitor or unsafe to monitor valves -- on a quarterly basis, with no ability to skip periods on a process-unit-by-process-unit basis. If, however, a process unit is subject to the Hazardous Organic NESHAP ("HON") or the modified-HON option in the Refinery MACT, MAP must comply with the monitoring requirements in the applicable regulation.

I. **Electronic Monitoring, Storing, and Reporting of LDAR Data**.

i. Electronic Storing and Reporting of LDAR Data. At each of its Refineries, MAP has and will continue to maintain an electronic database for storing and reporting LDAR data.

ii. Electronic Data Collection During LDAR Monitoring. By no later than two years after the Date of Lodging of the August 2001 Consent Decree, MAP shall use dataloggers and/or electronic data collection devices during all LDAR monitoring, in accordance with operational specifications to be proposed by MAP and certified by MAP as required in Paragraph 20.O.i.b. MAP or its designated contractor shall use its/their best efforts to transfer, on a daily basis, electronic data from electronic datalogging devices to the electronic database of Paragraph 20.I.i. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp, an operator identification, and an instrument identification. MAP may use paper logs where necessary or more feasible (e.g., small rounds, remonitoring, or when dataloggers are not available or broken), and shall record, at a minimum, the identification of the technician undertaking the monitoring, the date, and the identification of the monitoring equipment. MAP shall use its best efforts to transfer any manually recorded monitoring data to the electronic database of Paragraph 20.I.i. within seven days of monitoring.

J. **QA/QC of LDAR Data**. By no later than ninety (90) days after the Date of Lodging of the August 2001 Consent Decree, MAP or a third party contractor retained by MAP shall develop and implement a procedure to ensure a quality assurance/quality control ("QA/QC") review of all data generated by LDAR monitoring technicians. MAP shall ensure that monitoring data provided to MAP by its contractors is reviewed for QA/QC before the contractor submits the data to MAP. At least once per calendar quarter, MAP shall perform QA/QC of the contractor's monitoring data which shall include, but not be limited to: number of components monitored per technician, time between monitoring events, and abnormal data patterns.

K. **LDAR Personnel**. By no later than the Date of Lodging of the August 2001 Consent Decree, MAP shall establish a program that will hold LDAR personnel accountable for LDAR performance. MAP shall maintain a position within each Refinery responsible for LDAR management, with the authority to implement improvements.

L. **Adding New Valves and Pumps**. By no later than one hundred and twenty (120) days from the Date of Lodging of the August 2001 Consent Decree, MAP shall establish a

tracking program for maintenance records (e.g., a Management of Change program) to ensure that valves and pumps added to each Refinery during maintenance and construction is integrated into the LDAR program.

M. **Calibration/Calibration Drift Assessment.**

i. Calibration. MAP shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas, in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21.

ii. Calibration Drift Assessment. Beginning no later than the Date of Lodging of the August 2001 Consent Decree, MAP shall conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift, at a minimum. MAP shall conduct the calibration drift assessment using, at a minimum, a 500 ppm calibration gas. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, MAP shall remonitor all valves that were monitored since the last calibration that had a reading greater than 100 ppm and shall remonitor all pumps that were monitored since the last calibration that had a reading greater than 500 ppm.

N. **Delay of Repair.** Beginning no later than the Date of Lodging of the August 2001 Consent Decree, for any equipment for which MAP is allowed, under the applicable regulations, to place on the "delay of repair" list for repair:

i. For all equipment, MAP shall:

a. Require sign-off by the unit supervisor that the piece of equipment is technically infeasible to repair without a process unit shutdown, before the component is eligible for inclusion on the "delay of repair" list; and

b. Include equipment that is placed on the "delay of repair" list in MAP's regular LDAR monitoring.

ii. For valves:

a. For valves, other than control valves, leaking at a rate of 10,000 ppm or greater, MAP shall continue to use its "drill and tap" method for fixing such leaking valves, rather than placing

the valve on the "delay of repair" list, unless MAP can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in this manner. After two unsuccessful attempts to repair a leaking valve through the drill and tap method, MAP may place the leaking valve on its "delay of repair" list. If a new method develops for repairing such valves, MAP will advise EPA prior to implementing such new method.

b. With respect to components leaking between 500 ppm VOCs (the leak rate under this Paragraph) and the regulatory definition (10,000 pm VOCs in the majority of jurisdictions), drill and tap is not required if repairs are unsuccessful with conventional repair methods. Such components may be placed on the delay of repair list. After such components are repaired, they do not have to be remonitored for two consecutive months after the repair unless some other requirement outside of this First Revised Consent Decree requires more frequent monitoring.

iii. For pumps: At such time as the lower leak rate definition applies pursuant to Paragraph 20.E.ii, for pumps leaking at a rate of 2000 ppm or greater, MAP shall undertake its best efforts to isolate and repair such pumps with a first attempt at fifteen (15) days.

iv. MAP shall make reasonable efforts to minimize the number of components that is places on the "delay of repair" list pursuant to this Subparagraph 20.N. Once a component is on the list, MAP shall repair or replace it during the next unit shutdown or turnaround (provided that the shutdown or turnaround is planned at least fifteen days in advance).

O. **Recordkeeping and Reporting Requirements for this Paragraph**.

i. Outside of the Reports Required under 40 C.F.R. § 63.654 and the Progress Report Procedures of Section VIII (Recordkeeping and Reporting).

a. Written Refinery-Wide LDAR Program No later than thirty (30) days after completion of the development of the written refinery-wide LDAR programs that MAP develops pursuant to Paragraph 20.A, MAP shall submit a copy of each Refinery's Program to EPA, to the appropriate Region, and to the appropriate state agency.

b. Certification of Use of Electronic Data Collection during LDAR Monitoring. No later than two years and thirty days after the Date of Lodging of the August 2001 Consent Decree,

MAP shall certify that it utilizes at all of its Refineries, pursuant to the requirements of Paragraph 20.I.ii., electronic data collection devices during LDAR monitoring. As part of this certification, MAP shall certify that it is following the manufacturer's recommended operating procedures for electronic dataloggers and/or other electronic devices.

ii. As Part of Either the Reports Required under 40 C.F.R. § 63.654 or the Progress Report Procedures of Section VIII (Recordkeeping and Reporting). Consistent with the requirements of Section VIII (Recordkeeping and Reporting), MAP shall include the following information, at the following times, in its semi-annual progress reports:

a. First Progress Report Due under the August 2001 Consent Decree. At the later of: (i) the first progress report due under the August 2001 Consent Decree; or (ii) the first progress report in which the requirement becomes due, MAP shall include the following:

(1) A certification of the implementation of the "first attempt at repair" program of Paragraph 20.G;

(2) A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 20.J;

(3) An identification of the individual at each Refinery responsible for LDAR performance as required by Paragraph 20.K;

(4) A certification of the development of a tracking program for new valves and pumps added during maintenance and construction as required by Paragraph 20.L;

(5) A certification of the implementation of the calibration drift assessment procedures of Paragraph 20.M; and

(6) A certification of the implementation of the "delay of repair" procedures of Paragraph 20.N.

b. Semi-Annual Progress Report due on July 31 of Each Year. Until on or after termination of the First Revised Consent Decree, in the progress report that MAP submits on July 31 of each year, MAP shall include an identification of each audit that was conducted pursuant to the requirements of Paragraph 20.C in the previous calendar year including, for each Refinery, an identification of the auditors, a summary of the audit results, and a summary of the actions that MAP took or intends to take to correct all deficiencies identified in the audits.

c. In Each Report due under 40 C.F.R. § 63.654. In each report due under 40 C.F.R. § 63.654, MAP shall include:

(1) Training. Information identifying the measures that MAP took to comply with the provisions of Paragraph 20.B; and

(2) Monitoring. The following information on LDAR monitoring: (a) a list of the process units monitored during the quarter; (b) the number of valves and pumps monitored in each process unit; (c) the number of valves and pumps found leaking; (d) the number of "difficult to monitor" pieces of equipment monitored; (e) the projected month of the next monitoring event for that unit; and (f) a list of all equipment currently on the "delay of repair" list and the date each component was placed on the list.

P. **Agencies to Receive Reports, Plans and Certifications Required in this Paragraph; Number of Copies**. MAP shall submit all reports, plans and certifications required to be submitted under this Paragraph to EPA and to the appropriate EPA Region. Where indicated, MAP also shall submit the information to the appropriate state agency. By agreement between MAP and each of the offices that are to receive the materials in this Paragraph, MAP may submit the materials electronically.

21. **NSPS Applicability Re: Sulfur Recovery Plants**: Beginning no later than the Date of Lodging of the August 2001 Consent Decree, except as provided below, the following MAP Sulfur Recovery Plants ("SRPs") shall be subject to, and will continue to comply with, the applicable provisions of NSPS Part 60, Subpart A and J:

Canton Refinery (OH) SRP: Claus Trains #34 & #38;

Catlettsburg Refinery (KY) SRP: Claus Trains #1 & #2;

Detroit Refinery (MI) SRP: Claus Trains A, B & C;

Garyville Refinery (LA) SRP: Claus Trains #20 & #34;

Garyville Refinery (LA) SRP: Claus Trains #46 within 180 days after start-up;

Robinson Refinery (IL) SRP: Claus Trains #62 & #63;

St. Paul Park Refinery (MN) SRP: Claus Trains #1 & #2;

St. Paul Park Refinery (MN) SRP: Claus Train #3 by no later than November 16, 2004;

Texas City Refinery (TX) SRP: MAP shall install a Sulfur Recovery Plant at the Texas City Refinery no later than July 31, 2007. Beginning on July 31, 2007, the Sulfur Recovery Plant at the Texas City Refinery shall be subject to and will comply with all of the applicable provisions of NSPS Subpart A and J and any applicable provisions of this First Revised Consent Decree, except that MAP shall have until 180 days after the startup of the Texas City SRP to certify its SRP CEMS in accordance with Appendix A of Part 60 of Title 40 of the Code of Federal Regulations.

A. **Sulfur Pit Emissions**:

i. Except for the St. Paul Park Claus Train ## 1 and 3, MAP shall re-route all Sulfur Recovery Plant sulfur pit emissions from the Sulfur Recovery Plants identified at Paragraph 21, so that sulfur pit emissions to the atmosphere are either eliminated or included and monitored as part of the applicable Sulfur Recovery Plants tail gas emissions that meet the NSPS Subpart J limit for SO_2, a 12-hour rolling average of 250 ppmvd SO_2 at 0% oxygen, as required by 40 C.F.R. § 60.104(a)(2). MAP agrees to re-route all sulfur pit emissions by no later than the first turnaround (a turnaround shall mean a full unit turnaround of an approximately three or more week duration) of the applicable Claus train occurring six (6) months after the Date of Lodging of the August 2001 Consent Decree.

ii. St. Paul Park Claus Train ## 1 and 3. By no later than December 30, 2004, MAP shall eliminate all emissions from existing Sulfur Pit No. 1 (which services Claus Train # 1) by taking it out of service. MAP already has included sulfur pit vapor controls in the design and operation of the new Claus Train (# 3) which already has replaced Claus Train # 1.

B. **Sulfur Recovery Plant Emissions Compliance**:

i. By no later than the Date of Lodging of the August 2001 Consent Decree, MAP shall, for all periods of operation at each of its Sulfur Recovery Plants, comply with 40 C.F.R. § 60.104(a)(2), except during periods of startup, shutdown or malfunction of the Sulfur Recovery Plant or during a malfunction of the TGU(s). For the purpose of determining compliance with the Sulfur Recovery Plant emission limits, the "start-up/shutdown" provisions set forth in NSPS

Subpart A apply to the Sulfur Recovery Plant and not to the independent start-up or shut-down of its corresponding control device(s) (e.g., TGU). However, the Malfunction exemption set forth in NSPS Subpart A (and as defined in the First Revised Consent Decree at Paragraph 11.X) shall apply to both the Sulfur Recovery Plant and its control device(s).

ii. As of the Date of Lodging of the August 2001 Consent Decree, MAP shall monitor all emission points (stacks) to the atmosphere for tail gas emissions from each of its Sulfur Recovery Plants, and report excess emissions, as required by 40 C.F.R. §§ 60.7(c), 60.13, and 60.105(a)(5). During the life of the August 2001 Consent Decree and this First Revised Consent Decree, MAP shall continue to conduct Sulfur Recovery Plant emissions monitoring with CEMS at all of the emission points unless an SO_2 alternative monitoring procedure has been approved by EPA, per 40 C.F.R. § 60.13(i), for any of the emission points. This requirement for continuous monitoring of the Sulfur Recovery Plant emission points is not applicable to the AG Flaring Devices used to flare the Acid Gas or Sour Water Stripper Gas for those Sulfur Recovery Plants.

iii. At all times, including periods of startup, shutdown, and malfunction, MAP shall, to the extent practicable, operate and maintain its Sulfur Recovery Plant, its TGUs, and any supplemental control devices in accordance with its obligation to minimize Sulfur Recovery Plant emissions through implementation of good air pollution control practices as required in 40 C.F.R. § 60.11(d).

C. **Good Operation and Maintenance**: By no later than 120 days from the Date of Lodging of the August 2001 Consent Decree, MAP shall, for each refinery with a Sulfur Recovery Plant, submit to the applicable EPA Regional Office and applicable State or Local Agency, a summary of a plan, implemented or to be implemented, for enhanced maintenance and operation of its Sulfur Recovery Plant, the TGU(s), any supplemental control devices, and the appropriate Upstream Process Units ("PMO Plan"). The PMO Plan shall be a compilation of MAP's approaches for exercising good air pollution control practices for minimizing SO_2 emissions at each Refinery. The Plan(s) shall provide for continuous operation of the Sulfur Recovery Plant between scheduled maintenance turnarounds with minimization of emissions from the Sulfur

Recovery Plant. The Plan(s) shall include, but not be limited to, sulfur shedding procedures, new startup and shutdown procedures, emergency procedures and schedules to coordinate maintenance turnarounds of its Sulfur Recovery Plant Claus trains, TGU, and any supplemental control device to coincide with scheduled turnarounds of major Upstream Process Units. The Plan shall have as a goal the elimination of AG Flaring. MAP shall comply with the Plan at all times, including periods of start up, shut down, and malfunction of the Sulfur Recovery Plant. Modifications related to minimizing Acid Gas Flaring and/or SO_2 emissions made by MAP to the Plan shall be summarized in an annual submittal to the appropriate EPA Regional Office and appropriate State or Local Agency.

D. **Optimization Studies:**

i. To date, MAP has: conducted reliability and performance improvement audits for all of its Sulfur Recovery Plants, TGUs, and amine units in December 1999 and January 2000; created a company-wide "Amine Best Practices Group," and; created a "Sulfur and Amine Technologist" position on its "Refining Engineering" staff to assist the engineering and operating staff at each refinery in resolving issues of Sulfur Recovery Plant performance and reliability. To optimize performance at its Refineries, MAP shall install:

a. a redundant SCOT heater, reactor, waste heat boiler and quench tower at the Canton refinery by June 30, 2001;

b. a third Claus train with amine unit, tail gas unit and thermal oxidizer at the Garyville Refinery by December 31, 2001;

c. a replacement Claus Train for Train #1 and a second Tail Gas Treating Unit at the St. Paul Park Refinery by November 16, 2004 (MAP may operate the old Claus Train # 1 until December 30, 2004, to optimize and trouble-shoot the operation of the new SRU); and

d. a Sulfur Recovery Plant with amine unit and tail gas unit at the Texas City refinery by July 31, 2007.

ii. By no later than June 30, 2002, MAP shall complete an optimization study (internal or external) on each of the Sulfur Recovery Plant at the Detroit and Robinson refineries and report the results to the applicable EPA Regional Office and applicable State or Local Agency. The optimization study shall consider:

a. A detailed evaluation of plant design and capacity, operating parameters and efficiencies - including catalytic activity, and material balances;

b. An analysis of the composition of the acid gas and sour water stripper gas resulting from the processing of crude slate actually used, or expected to be used, in the Sulfur Recovery Plant;

c. A thorough review of each critical piece of process equipment and instrumentation within the Claus train that is designed to correct deficiencies or problems that prevent the Claus train from achieving its optimal sulfur recovery efficiency and expanded periods of operation;

d. Establishment of baseline data through testing and measurement of key parameters throughout the Claus train;

e. Establishment of a thermodynamic process model of the Claus train;

f. For any key parameters that have been determined to be at less than optimal levels, initiation of logical, sequential, or stepwise changes designed to move such parameters toward their optimal values;

g. Verification through testing, analysis of continuous emission monitoring data or other means, of incremental and cumulative improvements in sulfur recovery efficiency, if any;

h. Establishment of new operating procedures for long term efficient operation; and

i. Each study shall be conducted to optimize the performance of the Claus trains in light of the actual characteristics of the feeds to the SRUs.

E. **Tail Gas Incidents.** For Tail Gas Incidents, MAP shall follow the same investigative, reporting, corrective action and assessment of stipulated penalty procedures as outlined in

Paragraph 22 for Acid Gas and Sour Water Stripper Gas Flaring. Those procedures shall be applied to TGU shutdowns, bypasses of a TGU, unscheduled shutdowns of a Sulfur Recovery Plant or other miscellaneous unscheduled Sulfur Recovery Plant events which results in a Tail Gas Incident.

22. **Acid Gas and Sour Water Stripper Gas Flaring:** MAP has identified causes of AG Flaring at all of its Refineries for AG Flaring Incidents that occurred between 1997 and 2000. MAP has implemented (or is in the process of identifying and implementing) corrective actions to minimize the number and duration of AG Flaring events. For all Covered Refineries, MAP agrees to implement a program to investigate the cause of future Acid Gas Flaring Incidents, take reasonable steps to correct the conditions that have caused or contributed to such Acid Gas Flaring Incidents, and minimize the flaring of acid gas and sour water stripper gases from each of the Covered Refineries. MAP shall follow the procedures in this Paragraph 22 to evaluate whether future Acid Gas/Sour Water Stripper Gas Flaring Incidents are due to Malfunctions or are subject to stipulated penalties. The investigative and evaluative procedures in this Paragraph are also to be used for assessing if Tail Gas Incidents, as described in Paragraphs 21.E, are due to Malfunctions or are subject to stipulated penalties. The procedures, as set forth below, require root cause analysis and corrective action for all types of flaring, and stipulated penalties for Acid/Sour Water Stripper Gas Flaring Incidents or Tail Gas Incidents if the root causes were not due to malfunctions.

A. **Investigation and Reporting**

i. No later than forty-five (45) days following the end of an Acid Gas Flaring Incident, MAP shall submit to the EPA regional office in which the refinery is located, and the appropriate State or Local office, a report that sets forth the following:

a. The date and time that the Acid Gas Flaring Incident started and ended. To the extent that the Acid Gas Flaring Incident involved multiple releases either within a twenty-four (24) hour period or within subsequent, contiguous, non-overlapping twenty-four (24) hour periods, MAP shall set forth the starting and ending dates and times of each release;

b. An estimate of the quantity of sulfur dioxide that was emitted and the calculations that were used to determine that quantity;

c. The steps, if any, that MAP took to limit the duration and/or quantity of sulfur dioxide emissions associated with the Acid Gas Flaring Incident;

d. A detailed analysis that sets forth the Root Cause and all contributing causes of that Acid Gas Flaring Incident, to the extent determinable;

e. An analysis of the measures, if any, that are available to reduce the likelihood of a recurrence of an Acid Gas Flaring Incident resulting from the same Root Cause or contributing causes in the future. The analysis shall discuss the alternatives, if any, that are available, the probable effectiveness and cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation and maintenance changes shall be evaluated. If MAP concludes that corrective action(s) is (are) required under Paragraph 22.B, the report shall include a description of the action(s) and, if not already completed, a schedule for its (their) implementation, including proposed commencement and completion dates. If MAP concludes that corrective action is not required under Paragraph 22.B, the report shall explain the basis for that conclusion;

f. A statement that: (i) specifically identifies each of the grounds for stipulated penalties in Paragraphs 22.C.i.a and 22.C.i.b of this Decree and describes whether or not the Acid Gas Flaring Incident falls under any of those grounds; (ii) if an Acid Gas Flaring Incident falls under Paragraph 22.C.i.c of this Decree, describes which Paragraph (22.C.i.c.1 or 22.C.i.c.2) applies and why; and (iii) if an Acid Gas Flaring Incident falls under either Paragraph 22.C.i.b or Paragraph 22.C.i.c.2, states whether or not MAP asserts a defense to the Flaring Incident, and if so, a description of the defense; and

g. To the extent that investigations of the causes and/or possible corrective actions still are underway on the due date of the report, a statement of the anticipated date by which a follow-up report fully conforming to the requirements of this Paragraph 22.A.i.d and 22.A.i.e shall be submitted; provided, however, that if MAP has not submitted a report or a series of reports containing the information required to be submitted under this Paragraph within the 45 day time period set forth in Paragraph 22.A (or such additional time as U.S. EPA may allow) after the due date for the initial report for the Acid Gas Flaring Incident, the stipulated penalty provisions of Paragraph 48 shall apply, but MAP shall retain the right to dispute, under the dispute resolution provision of this First Revised Consent Decree, any demand for stipulated penalties that was issued as a result of MAP's failure to submit the report required under this Paragraph within the time frame set forth. Nothing in this Paragraph shall be deemed to excuse MAP from its investigation, reporting, and corrective action obligations under this Section for any Acid Gas Flaring Incident which occurs after an Acid Gas Flaring Incident for which MAP has requested an extension of time under this Paragraph.

h. To the extent that completion of the implementation of corrective action(s), if any, is not finalized at the time of the submission of the report required under this Paragraph, then, by no later than thirty (30) days after completion of the implementation of corrective action(s), MAP shall submit a report identifying the corrective action(s) taken and the dates of commencement and completion of

implementation. Alternatively, MAP may submit such information in the next regular semi-annual report submitted under this First Revised Consent Decree.

B. **Corrective Action**

i. In response to any Flaring Incident, MAP as expeditiously as practicable, shall take such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of that Acid Gas Flaring Incident.

ii. If EPA does not notify MAP in writing within thirty (30) days of receipt of the report(s) required by Paragraph 22.A.i that it objects to one or more aspects of MAP's proposed corrective action(s), if any, and schedule(s) of implementation, if any, then that (those) action(s) and schedule(s) shall be deemed acceptable for purposes of MAP's compliance with Paragraph 22.B.i of this Decree. EPA does not, however, by its consent to the entry of this First Revised Consent Decree or by its failure to object to any corrective action that MAP may take in the future, warrant or aver in any manner that any of MAP's corrective actions in the future shall result in compliance with the provisions of the Clean Air Act or its implementing regulations. Notwithstanding EPA's review of any plans, reports, corrective measures or procedures under this Paragraph 22, MAP shall remain solely responsible for non-compliance with the Clean Air Act and its implementing regulations. Nothing in this Paragraph 22 shall be construed as a waiver of EPA's rights under the Clean Air Act and its regulations for future violations of the Act or its regulations.

iii. If EPA does object, in whole or in part, to MAP's proposed corrective action(s) and/or its schedule(s) of implementation, or, where applicable, to the absence of such proposal(s) and/or schedule(s), it shall notify MAP of that fact within thirty (30) days following receipt of the report(s) required by Paragraph 22.A.i above. If MAP and EPA cannot agree on the appropriate corrective action(s), if any, to be taken in response to a particular Acid Gas Flaring Incident, either Party may invoke the Dispute Resolution provisions of Section XIV of the First Revised Consent Decree.

iv. Nothing in Paragraph 22 shall be construed to limit MAP's right to take such corrective actions as it deems necessary and appropriate immediately following an Acid Gas Flaring Incident or in the period during preparation and review of any reports required under this Section.

C. **Stipulated Penalties**

i. The provisions of this Paragraph 22.C shall apply to each Covered Refinery. The provisions of Paragraph 22.C are intended to implement the process outlined in the logic diagram attached hereto as Appendix O to this First Revised Consent Decree. These provisions shall be interpreted and construed, to the maximum extent feasible, to be consistent with that Attachment. However, in the event of a conflict between the language of Paragraph 22 and Appendix O, the language of this Paragraph shall control.

a. The stipulated penalty provisions of Paragraph 48 shall apply to any Acid Gas Flaring Incident for which the Root Cause was one or more or the following acts, omissions, or events:

1. Error resulting from careless operation by the personnel charged with the responsibility for the Sulfur Recovery Plants, TGUs, or Upstream Process Units;

2. Failure to follow written procedures;

3 A failure of equipment that is due to a failure by MAP to operate and maintain that equipment in a manner consistent with good engineering practice; or

4. The following Root Causes shall not provide a basis for asserting a malfunction defense unless MAP can demonstrate to the EPA that such root cause substantially differs from the earlier same Root Cause:

   i. Canton: SRU Air Blower Failures or Tail Gas Unit bypassing due to single train;

   ii. Catlettsburg: excessive hydrocarbons in SRU feed;

   iii. Detroit: DCS power failures, excessive hydrocarbon in SRU feed, or loss of air to C SRU Train;

   iv. Garyville: hydrocarbon carryover from the HGO Hydrotreater, failure of acid gas feed solenoid valve, or bearing failure of main air blowers;

   v. Robinson: excessive hydrocarbons in SRU feed, amine foaming/contamination, or air blower failures; and

vi. St. Paul Park: instrument freeze-up problems or corrosion on instrument wiring.

Except for a force majeure event, MAP shall have no defenses to a demand for stipulated penalties for an Acid Gas Flaring Incident falling under this Paragraph 22.C.i.a.

b. The stipulated penalty provisions of Paragraph 48 shall apply to any Acid Gas Flaring Incident that either:

1. Results in emissions of sulfur dioxide at a rate greater than twenty (20.0) pounds per hour continuously for three (3) consecutive hours or more and MAP failed to act in a manner consistent with the PMO Plan and/or to take any action during the Acid Gas Flaring Incident or Tail Gas Incident to limit the duration and/or quantity of sulfur dioxide emissions associated with such Incident; or

2. (i) For Acid Gas Flaring Incidents, causes the total number of Acid Gas Flaring Incidents in a rolling twelve (12) month period to exceed five (5); or (ii) for Tail Gas Incidents, causes the total number of Tail Gas Incidents per Refinery in a rolling twelve (12) month period to exceed five (5).

In response to a demand by the United States for stipulated penalties, the United States and MAP both agree that MAP shall be entitled to assert a Malfunction defense with respect to any Acid Gas Flaring Incident falling under this Paragraph. In the event that a dispute arising under this Paragraph is brought to the Court pursuant to the dispute resolution provisions of this First Revised Consent Decree, nothing in this Paragraph is intended or shall be construed to stop MAP from asserting that, in addition to the Malfunction Defense, Startup, Shutdown, and upset defenses are available for Acid Gas or Sour Water Stripper Gas Flaring Incidents under 40 C.F.R. § 60.104(a)(1), nor to stop the United States from asserting its view that such defenses are not available. In the event that a Flaring Incident falls under both Paragraph 22.C.i.a and Paragraph 22.C.i.b , then Paragraph 22.C.i.a shall apply.

c. With respect to any Acid Gas Flaring Incident other than those identified in Paragraphs 22.C.i.a and 22.C.i.b, the following provisions shall apply:

1. First Time: If the Root Cause of the Acid Gas Flaring Incident was not a recurrence of the same Root Cause that resulted in a previous Acid Gas Flaring Incident at that refinery that occurred since the effective date of the August 2001 Decree, then:

i. If the Root Cause of the Acid Gas Flaring Incident was sudden, infrequent, and not reasonably preventable through the exercise of good engineering

practice, then that cause shall be designated as an agreed-upon malfunction for purposes of reviewing subsequent Acid Gas Flaring Incidents;

ii. If the Root Cause of the Acid Gas Flaring Incident was sudden and infrequent, and was reasonably preventable through the exercise of good engineering practice, then MAP shall implement corrective action(s) pursuant to Paragraph 22.B.i. of this Section.

2. Recurrence: If the Root Cause is a recurrence of the same Root Cause that resulted in a previous Acid Gas Flaring Incident that occurred since the Effective Date of the August 2001 Consent Decree, then MAP shall be liable for stipulated penalties under Paragraph 48 of the First Revised Consent Decree unless:

i. the Flaring Incident resulted from a Malfunction, or

ii. the Root Cause previously was designated as an agreed-upon malfunction under Paragraph 22.C.i.c.1.(i); provided, however, that in the event that a dispute arising under this Paragraph is brought to the Court pursuant to the dispute resolution provisions of this First Revised Consent Decree, nothing in this Paragraph is intended or shall be construed to stop MAP from asserting its view that, in addition to a Malfunction defense, Startup, Shutdown, and upset defenses are available for Acid Gas or Sour Water Stripper Gas Flaring Incidents under 40 C.F.R. § 60.104(a)(1), nor to stop the United States from asserting its view that such defenses are not available; or

iii. the Acid Gas Flaring Incident was a recurrence of an event for which MAP had previously developed, or was in the process of developing, a corrective action plan but MAP had not yet completed implementation.

d. Other than for a Malfunction or force majeure, if no Acid Gas Flaring Incident or violation of the final emission limit for that refinery established under Paragraph 21 occurs at a refinery for a rolling 36 month period, then the stipulated penalty provisions of Paragraph 48 no longer apply at that refinery. EPA may elect to reinstate the stipulated penalty provision if MAP has an Acid Gas Flaring Incident which would otherwise be subject to stipulated penalties. EPA's decision shall not be subject to dispute resolution. Once reinstated, the stipulated penalty provision shall continue for the remaining life of this First Revised Consent Decree for that Refinery.

D. **Miscellaneous**

i. **Calculation of the Quantity of Sulfur Dioxide Emissions resulting from AG Flaring**: For purposes of this First Revised Consent Decree, the quantity of SO_2 emissions resulting from AG Flaring shall be calculated by the following formula:

Tons of SO_2 = [FR][TD][ConcH_2S][8.44 x 10^{-5}].

The quantity of SO_2 emitted shall be rounded to one decimal point. (Thus, for example, for a calculation that results in a number equal to 10.050 tons, the quantity of SO_2 emitted shall be rounded to 10.1 tons.) For purposes of determining the occurrence of, or the total quantity of SO_2 emissions resulting from, a AG Flaring Incident that is comprised of intermittent AG Flaring, the quantity of SO_2 emitted shall be equal to the sum of the quantities of SO_2 flared during each such period of intermittent AG Flaring.

ii. **Calculation of the Rate of SO_2 Emissions During AG Flaring and HC Flaring**. For purposes of this First Revised Consent Decree, the rate of SO_2 emissions resulting from AG Flaring and HC Flaring shall be expressed in terms of pounds per hour, and shall be calculated by the following formula:

ER = [FR][ConcH_2S][0.169].

The emission rate shall be rounded to one decimal point. (Thus, for example, for a calculation that results in an emission rate of 19.95 pounds of SO_2 per hour, the emission rate shall be rounded to 20.0 pounds of SO_2 per hour; for a calculation that results in an emission rate of 20.05 pounds of SO_2 per hour, the emission rate shall be rounded to 20.1.)

iii. **Meaning of Variables and Derivation of Multipliers used in the Equations in Paragraph 22:**

ER =	Emission Rate in pounds of SO_2 per hour
FR =	Average Flow Rate to Flaring Device(s) during Flaring, in standard cubic feet per hour
TD =	Total Duration of Flaring in hours
ConcH_2S =	Average Concentration of Hydrogen Sulfide in gas during Flaring (or immediately prior to Flaring if all gas is being flared) expressed as a volume fraction (scf H_2S/scf gas)
8.44 x 10^{-5} =	[lb mole H_2S/379 scf H_2S][64 lbs SO_2/lb mole H_2S][Ton/2000 lbs]
0.169 =	[lb mole H_2S/379 scf H_2S][1.0 lb mole SO_2/1 lb mole H_2S][64 lb SO_2/1.0 lb mole SO_2]

The flow of gas to the AG Flaring and HC Flaring Device(s) ("FR") shall be as measured by the relevant flow meter or reliable flow estimation parameters. Hydrogen sulfide concentration ("ConcH_2S") shall be determined from the Sulfur Recovery Plant feed gas analyzer or from knowledge of the sulfur content of the process gas being flared.. In the event that either of these data points is unavailable or inaccurate, the missing data point(s) shall be estimated according to best engineering judgment. The report required under Paragraph 22.A.i. -- shall include the data used in the calculation and an explanation of the basis for any estimates of missing data points.

iv. **Calculation of the Quantity of SO_2 Emissions resulting from a Tail Gas Incident:** For the purposes of this First Revised Consent Decree, the quantity of SO_2 emissions resulting from a Tail Gas Incident shall be calculated by one of the following methods, based on the type of event:

a. If the Tail Gas Incident is combusted in a flare the SO_2 emissions are calculated using the methods outlined in Paragraph 22.D.i and ii; or

b. If the Tail Gas Incident is a event exceeding the 250 ppmvd NSPS J limit, from a monitored Sulfur Recovery Plant incinerator or stack, then the following formula applies:

$$ER_{TGI} = \sum_{i=1}^{TD_{TGI}} [FR_{Inc.}]_i [Conc.\ SO_2 - 250]_i [0.169 \times 10^{-6}] \left[\frac{20.9 - \%\ O_2}{20.9}\right]_i$$

Where:

ER_{TGI} = Emissions from Tail Gas at the Sulfur Recovery Plant incinerator or stack, SO_2 lb over a twenty-four (24) hour period

TD_{TGI} = Total Duration (number of hours) when the incinerator or stack CEMS exceeded 250 ppmvd SO_2 corrected to 0% O_2 on a rolling twelve (12) hour average, in each twenty-four (24) hour period of the Incident

i = Each hourly average

$FR_{Inc.}$ = Incinerator or Stack Exhaust Gas Flow Rate (standard cubic feet per hour, dry basis) (actual stack monitor data or engineering estimate based on the acid gas feed rate to the SRP) for each hour of the Incident

Conc. SO_2 = Each actual twelve (12) hour rolling average SO_2 concentration (CEMS data) that is greater than 250 ppm in the incinerator or stack exhaust gas, ppmvd corrected to 0% O_2, for each hour of the Incident

$\%\ O_2$ = O_2 concentration (CEMS data) in the incinerator or stack exhaust gas in volume % on dry basis for each hour of the Incident

0.169×10^{-6} = [lb mole of SO_2 / 379 SO_2] [64 lbs SO_2 / lb mole SO_2] [1×10^{-6}]

Standard conditions = 60 degree F; 14.7 lb_{force}/sq.in. absolute

In the event the concentration SO_2 data point is inaccurate or not available or a flow meter for FR_{Inc}, does not exist or is inoperable, then estimates will be used based on best engineering judgement.

v. Any disputes under the provisions of this Part shall be resolved in accordance with the Section XIV (Dispute Resolution) of this First Revised Consent Decree.

23. **RCRA Injunctive Measures – Detroit and Robinson:**

A. Detroit:

i. MAP certifies that for the Detroit Refinery:

a. In accordance with the requirements of RCRA, MAP has disposed of the debris discovered during a 1998 National Enforcement Investigations Center ("NEIC") inspection of the Detroit Refinery that was found in the following containers: (i) a cut-off 55 gallon drum ("Cut-off Drum") that was located at the 29T12 sump and contained debris, including personal protective equipment, contaminated with API sludge; (ii) a bottle labeled "waste freon" ("Freon Bottle") that had been stored in a cabinet in the quality control laboratory; (iii) a container labeled "hazardous waste" in the quality control laboratory; and (iv) a 11,500 portable frac tank ("Frac Tank") located at the 29T12 pad;

b. In accordance with the requirements of RCRA, MAP has disposed of the Cut-off Drum and the Freon Bottle;

c. MAP did not own, at the time of the National Enforcement and Investigation Center ("NEIC") inspection, and no longer has custody or control over, the Frac Tank;

d. MAP has repaired the interior lining in the vault system of Tank 21V47;

e. MAP no longer uses Tank 21V47 for managing hazardous wastes; and

f. MAP has amended its RCRA contingency plan to include all information required by Michigan Rule 299.9306(1) and 40 C.F.R. § 265.52.

ii. By no later than thirty (30) days after the entry of the August 2001 Consent Decree, MAP shall submit to the Waste, Pesticides and Toxics Division of EPA Region 5, a plan for the Detroit Refinery that includes: (i) procedures for managing API sludge in accordance with all applicable federal and state RCRA requirements; (ii) an identification of all satellite accumulation areas at the Detroit Refinery and a procedure for updating the identification of these areas as such areas may change from time to time; and (iii) a procedure for documenting all inspections required pursuant to federal and state RCRA requirements. The plan shall be subject to the approval of, disapproval of, or modification by EPA. Within sixty (60) days after receiving any notification of disapproval or request for modification from EPA, MAP shall submit to EPA a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with modification, MAP shall timely implement the plan. Disputes arising under this Paragraph 23.A.ii. shall be resolved in accordance with the dispute resolution provisions of the August 2001 Consent Decree.

iii. If any required action has not been taken or completed in accordance with any requirement of this Paragraph, within ten (10) calendar days after the due date, MAP shall notify EPA of the failure, the reason for the failure, and the proposed date for compliance. Nothing in this Paragraph 23.A.iii. shall be construed to limit MAP's liability for stipulated penalties except upon the express written waiver of EPA.

B. Robinson: MAP shall (i) maintain records for documenting repairs of leaking closure devices on Level 2 hazardous waste containers subject to regulation under 40 C.F.R. § 265.1087(d)(4)(iii); and (ii) ensure that all spent material from carbon canisters is characterized properly to determine if it is a hazardous waste.

VI. PERMITTING

24. A. **Construction**: MAP agrees to obtain all required federally enforceable permits for the construction of the pollution control technology or installation of equipment to be installed

required to meet the above pollution reductions. This Paragraph is not intended to prevent MAP from applying to the appropriate permitting authority for a pollution control project exclusion.

B. **Schedules of Implementation and Modifications Thereto**: For any work in Section V of this First Revised Consent Decree that requires a federal, state and/or local permit or approval, MAP shall be responsible for submitting in a timely fashion applications for federal, state and local permits and approvals for work and activities required so that permit or approval decisions can be made in a timely fashion. MAP shall use its best efforts to: (i) submit permit applications (i.e., applications for permits to construct operate or their equivalent) that comply with all applicable requirements; and (ii) secure approval of permits after filing the applications, including timely supplying additional information, if requested. If it appears that the failure of a governmental entity to act upon a timely-submitted permit application may delay MAP's performance of work according to an applicable implementation schedule, MAP shall notify the appropriate EPA regional office of any such delays as soon as MAP reasonably concludes that the delay could affect its ability to comply with the implementation schedule set forth in this First Revised Consent Decree. MAP shall propose a modification to the applicable schedule of implementation. EPA shall not unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. Stipulated penalties shall not accrue nor be due and owing during any period between an originally-scheduled implementation date and an approved modification to such date; provided however, that EPA shall retain the right to seek stipulated penalties if EPA does not approve a modification to a date or dates. The failure of a governmental entity to act upon a timely-submitted permit or approval application shall not constitute a force majeure event triggering the requirements of Section XIII; this Paragraph shall apply.

C. **Commercial Unavailability of Control Equipment and/or Additives**: MAP shall be solely responsible for compliance with any deadline or the performance of any work as described in Section V of this First Revised Consent Decree that requires the acquisition and installation of control equipment and/or catalyst additive. If it appears that the commercial

unavailability of any control equipment and/or catalyst additive may delay MAP's performance of work according to an applicable implementation schedule, MAP shall notify the United States in accordance with the requirements of Paragraph 67 of this First Revised Consent Decree of any such delays as soon as MAP reasonably concludes that the delay could affect its ability to comply with the implementation schedule set forth in this First Revised Consent Decree. MAP shall propose a modification to the applicable schedule of implementation. Prior to the notice required by this Paragraph 24.C, MAP must have contacted a reasonable number of vendors of such equipment or additive and obtained a written representation (or equivalent communication to EPA) from the vendor that the equipment or additive is commercially unavailable. In the notice, MAP shall reference this Paragraph 24.C. of this First Revised Consent Decree, identify the milestone date(s) it contends it will not be able to meet, provide the United States with written correspondence to the vendor identifying efforts made to secure the control equipment or catalyst additive, and describe the specific efforts MAP has taken and will continue to take to find such equipment or additive. MAP may propose a modified schedule or modification of other requirements of this First Revised Consent Decree to address such commercial unavailability. Section XIV ("Retention of Jurisdiction/Dispute Resolution") shall govern the resolution of any claim of commercial unavailability. EPA shall not unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. Stipulated penalties shall not accrue nor be due and owing during any period between an originally-scheduled implementation date and an approved modification to such date; provided however, that EPA shall retain the right to seek stipulated penalties if EPA does not approve a modification to a date or dates. The failure by MAP to secure control equipment and/or catalyst additive shall not constitute a force majeure event triggering the requirements of Section XIII; this Paragraph shall apply.

25. **Operation**: As soon as practicable following the Date of Lodging of the August 2001 Consent Decree, but in no event later than twelve (12) months following the Date of Lodging of the August 2001 Consent Decree, MAP shall submit applications to incorporate the emission

limits and standards required by Paragraphs 12-16, 17.A.i, and 21 that are effective as of the Date of Entry of the August 2001 Consent Decree into minor or major new source review permits or other permits that will ensure that the underlying emission limit or standard survives the termination of this First Revised Consent Decree. Upon issuance of such permits, MAP shall file any applications necessary to incorporate the requirements of those permits into the Refinery's Title V permit. As soon as practicable, but in no event later than thirty (30) days after the effective date or establishment of any emission limits, standards and schedules under Section V of the First Revised Consent Decree ("Affirmative Relief/Environmental Projects (or Measures)"), MAP shall submit applications to incorporate those emission limitations into minor or major new source review permits or other permits that will ensure that the underlying emission limit or standard survives the termination of this First Revised Consent Decree. Upon issuance of such permits, MAP shall file any applications necessary to incorporate the requirements of those permits into the Refinery's Title V permit. The Parties agree that incorporation of the requirements of this Decree into Title V permits may be by "administrative amendment" under 40 C.F.R. 70.7(d) and analogous state Title V rules. In states that have a consolidated program for minor or major new source review permits and Title V permits, MAP may submit an application for the incorporation of the emission limits and standards in this Consent Decree by means of a Title V permit application or modification, or an equivalent means as allowed by the state permitting authority, with the understanding that the permit application or modification creates an underlying requirement ensuring survival of the emission limit or standard after the termination of this First Revised Consent Decree.

26. **Plant Applicability Limits** -- This Paragraph 26 sets forth a process for the establishment of partial "plant applicability limits" ("PALs") for each of the MAP petroleum refineries located at Robinson, Illinois; Garyville, Louisiana; Texas City, Texas; Catlettsburg, Kentucky; Detroit, Michigan; Canton, Ohio; and St. Paul, Minnesota for the pollutants NOx, SO_2, PM and CO. Under this Paragraph 26, MAP may not emit NOx, SO_2, PM or CO into the atmosphere from the emissions units included within a PAL in excess of the aggregate emissions

limits ("Cap") established for the PAL pursuant to this Paragraph 26. The Cap established under this Paragraph 26 for each refinery shall be considered the actual emissions for the emissions units under the PAL for the purpose of determining emissions increases associated with a physical change or change in method of operation for such emissions units for Federal new source review for the life of the PAL.

A. **Covered Emissions Units:**

i. The initial PALs established pursuant to this Paragraph 26 shall include only those emissions units identified in Appendix P.

ii. MAP may expand, upon EPA approval, the universe of emissions units to be included within a particular PAL to include additional emissions units. MAP shall identify all combustion units at each refinery and will endeavor to include in the PAL such units, where practicable.

iii. For newly constructed units included within the PAL that receive major NSR permits and that reflect the application of BACT or LAER, the Cap shall be increased by an amount equal to the emissions units allowable emissions. For emissions units included within the PAL that are modified, that receive major NSR permits, and that reflect the application of BACT or LAER, the Cap shall be increased by an amount equal to the difference between the new allowable emissions rate and the emissions unit's previous contribution to the Cap as determined in reference to Appendix P.

B. **Establishing Baseline Emissions**: MAP shall establish baseline emissions for emissions units within any PAL based on emissions from the two most recent consecutive calendar years, or other such representative two calendar year period as approved by EPA. MAP shall calculate the baseline emissions covering the time period set forth in the preceding sentence and set forth in Appendix P ("Baseline Cap and Compliance Determination for the PAL(s)").

C. **Initial Cap**: On or before December 31, 2003, MAP shall provide EPA with a report that identifies its proposed level for the Cap associated with each initial PAL in tons per year on a 365-day rolling average consistent with Appendix P ("Baseline, Cap, and Compliance

Determination for the PAL(s)"). The effective date of the PALs at each of MAP's petroleum refineries shall be the date EPA approves each such PAL.

D. **Changes in Cap(s)**: On or before each February 15th after the PAL is approved, and each February 15th thereafter, MAP shall submit to EPA for its approval, an application to revise the then existing Cap. MAP's proposal shall reflect the contribution to the Cap from each emissions unit covered by the PAL, including those emissions units that were controlled as required by the First Revised Consent Decree pursuant to Section V ("Compliance Measures") in the preceding calendar year. The recalculation of the cap for emissions from units that were controlled as required by the First Revised Consent Decree in the preceding year, shall be determined by reference to Section II.B of Appendix P. In addition, MAP's proposed revision to a Cap must be consistent with any regulatory requirements enacted by a State or local authority to meet attainment objectives, effective before December 31 of that preceding calendar year. Each Cap proposed by MAP pursuant to this Paragraph 26 shall be expressed in tons per year on a 365-day rolling average consistent with Appendix P.

E. **Cap Approval and Compliance**: EPA will notify MAP of its determination of the Cap proposed by MAP. MAP will demonstrate compliance with each Cap on a 365-day rolling average beginning no later than January 1st of the calendar year following EPA's approval and on each day thereafter through December 31st of that calendar year.

F. **PSD and Major Non-Attainment NSR Major Modifications to or Affecting Emissions Units within the PAL**: During the life of a PAL, the following shall apply to determination of whether a major modification has occurred pursuant to PSD and major non-attainment NSR:

i. For a modification to an emission unit under a PAL, for a particular pollutant, that affects only other emissions units within the PAL, the net emissions change for units under the PAL shall be zero.

ii. For modifications to an emissions unit within a PAL, for a particular pollutant, that affect an emissions unit outside of the PAL:

a. the emissions change for the unit modified within the PAL shall be zero;

b. the emissions change for emissions units under the PAL that are not modified but are affected shall be zero; and

c. the emissions change for emissions units outside of the PAL that are affected shall be calculated as required by the applicable PSD and major non-attainment NSR regulations.

iii. For a modification to a unit outside of the PAL, for a particular pollutant, that affects an emissions unit within a PAL:

a. the emissions change for the emissions unit within the PAL that is affected shall be zero; and

b. the emissions change for the emissions unit outside the PAL that is affected shall be calculated as required by the applicable PSD and major non-attainment NSR regulations.

iv. For the purposes of netting for changes to units outside of the PAL, no contemporaneous increases or decreases shall be allowed or considered for emissions units under the PAL.

v. Net emissions change for emissions units not within the PAL shall always be less than the significance levels. Increased emissions allowed pursuant to issuance of a PSD or major non-attainment NSR permits shall not be considered an increase pursuant to 40 C.F.R. § 52.21, and the SIP-approved PSD and major non-attainment NSR programs.

G. **Consent Decree/NSPS/Minor NSR Applicability**:

i. This Paragraph does not in any way change, alter or modify any obligation of MAP, to comply with the concentration based limits ("ppmvd" or "lb/mmBTU") imposed by Paragraphs 12, 16, and 21.

ii. This Paragraph does not in any way change, alter or modify any obligation of MAP, whether existing or imposed by virtue of this First Revised Consent Decree, to comply with the NSPS. If any physical or operational change results in an increase in the emission rate to the

atmosphere of any pollutant from the affected facility to which a NSPS applies, MAP must comply with all applicable parts of the NSPS and the General Provisions in 40 C.F.R. Part 60, Subpart A. The determination of whether there has been an increase in emissions to the atmosphere shall be based on a comparison of the emission rate (in pounds per hour) at the maximum achievable capacity prior to and after the physical or operational change.

iii. The establishment of a PAL under this Paragraph does not in any way change, alter or modify any obligation of MAP, to comply with any applicable minor NSR permitting requirements or obligations.

H. **Notice of Changes to Emissions Unit:**

Together with its annual proposal for a Cap revision required by Paragraph 26.D, MAP shall provide a written report to EPA and the Plaintiff-Intervenors of actual construction of physical or operational changes made to emissions units included within any PAL. The report shall:

a. Describe the physical or operational change;

b. Identify the emissions unit that the physical or operational change has affected or will affect, whether or not such emissions unit is included within the Cap;

c. Provide a statement of whether or not any New Source Performance Standard ("NSPS") is applicable to the physical or operational change and the reason why the NSPS does or does not apply; and

d. A netting analysis (increases and decreases) for all emissions units not within the PAL that emit SO_2 or NOx, PM and CO for that prior calendar year.

I. **PAL and Cap Life and Renewal**

i. **PAL Life**: The life of any PAL established pursuant to this Paragraph 26 shall be no more than five (5) years from its effective date as determined under Paragraph 26.C . The provisions of Paragraph 26.F of the First Revised Consent Decree shall apply only during those same five (5) years.

ii. **Cap Life:** Expiration of the Cap without renewal shall result in an examination of PSD/NSR applicability for all emissions units included within the PAL in accordance with the then-effective PSD and major non-attainment NSR regulations.

iii. **Second PAL**: At any time prior to three (3) months before termination of a PAL established pursuant to Paragraph 26.C, MAP may apply to EPA to renew such PAL. The baseline for any second PAL shall be calculated pursuant to Appendix P. MAP shall determine baseline emissions for emissions unit to be included in any second PAL through monitoring conducted consistent with Appendix P. MAP shall comply with the terms and conditions of Paragraph 26.A-G with respect to any renewed PAL.

J. **Cap Exceedence:** If MAP allows or causes an exceedence of the 365-day rolling average cap for any pollutant, MAP shall undertake an analysis to determine whether emission unit(s) at the source were modified for that pollutant during the life of the PAL. MAP shall complete the analysis required by the foregoing sentence within ninety (90) days of the exceedence and report such analysis to EPA. No later than 180 days from the date of the exceedence, MAP shall submit to EPA for its review and approval a proposed BACT/LAER determination for each modified emissions unit(s) identified above and a schedule for installation of any BACT/LAER controls proposed. MAP shall propose a schedule that will propose installation of controls as soon as practicable but not to exceed forty-two (42) months from the initial date of the exceedence. EPA shall review and, after consultation with the appropriate State or local permitting authority, notify MAP of its approval or rejection of the proposal. Upon EPA approval, MAP shall install BACT (or LAER as appropriate) on the emissions units modified. The modification analysis shall be conducted as though the cap is a non-enforceable limit. Except as provided in this Paragraph 26, nothing in this provision is intended to limit the applicability of 40 C.F.R. § 52.21, the SIP-approved PSD and major non-attainment NSR programs.

K. **CAP Exceedence Stipulated Penalties**: For exceeding a cap, MAP shall pay the higher of $27,500 (as adjusted for inflation) per pollutant for each succeeding day that MAP

exceeds the 365-day annual rolling average or $20,000 per ton (or fraction thereof) in excess of the cap for each pollutant.

L. **Plantwide Sulfur Dioxide Emissions Limitations for the Texas City Refinery.** MAP shall not exceed sulfur dioxide emissions of 876 tons per calendar year from the Texas City Refinery for each of the years 2005 and 2006. By no later than January 31 of 2006 and 2007, MAP shall submit a report to EPA that sets forth the total plantwide sulfur dioxide emissions for the preceding calendar year, together with the calculations used in determining the emissions. If MAP exceeds the annual emission limit in this Paragraph 26.L for the years 2005 or 2006, MAP shall pay as stipulated penalties $25,000 per ton (or fraction thereof) of sulfur dioxide emissions in excess of 876 tons per calendar year that are generated from the combustion of high sulfur fuel gas in the ## 4 and 5 Topper Crude Charge Heaters.

27. **Retirement of NOx Allowances/Credits**: MAP shall surrender to EPA any NOx allowances or credits allocated to the affected emissions units (e.g., NOx Budget Unit, NOx Budget Opt-In Unit, or any equivalent unit in a federally-approved NOx or ozone control program) at the Covered Refineries under any federally-approved NOx or ozone control program to the extent that such allowances or credits exceed the emissions allowed under the 2001 Consent Decree or this First Revised Consent Decree for the affected emissions units at that Refinery for the period of the allocation. Each year by the deadline for transferring NOx allowances or credits for compliance under such control program, MAP shall make this surrender by transferring the unused NOx allowances or credits to an account specified by EPA. The surrendered NOx allowances or credits shall not be used for compliance under such control program. The emissions allowed under the August 2001 Consent Decree or this First Revised Consent Decree for the affected emissions unit for the allocation period shall be calculated by multiplying the unit's allowed NOx emission rate (in pounds per mmBtu heat input) under the August 2001 Consent Decree or this First Revised Consent Decree by that unit's total actual heat input (in mmBtu) for the allocation period divided by 2000 pounds per ton. Nothing in this Paragraph shall preclude MAP from selling or trading NOx allowances or credits allocated to an affected emissions unit at

any of the Covered Refineries to the extent that such allowances or credits do not exceed the emissions allowed under the August 2001 Consent Decree or this First Revised Consent Decree for the affected emission units for the allocation period. The NOx emission reductions required under the August 2001 Consent Decree or this First Revised Consent Decree shall be treated as reductions required under the Clean Air Act and shall not be treated as early reductions under any federally-approved NOx or ozone control program.

VII. ENVIRONMENTALLY BENEFICIAL PROJECTS

28. [Omitted.]

29. **Pollution Reduction -- Supplemental and Beneficial Environmental Projects**

A. MAP shall undertake the following environmentally beneficial projects with a collective cost to the Company of approximately $6.5 million. MAP agrees that in any public statements regarding the funding of the projects identified below, MAP will state that they are being undertaken pursuant to this settlement.

B. Fordson Island:

i. By no later than December 31, 2006, MAP shall use reasonable efforts to convey its ownership interest in Fordson Island located in the Rouge River (which, as of the Date of Lodging of the August 2001 Consent Decree, had an estimated market value of $500,000) to a federal, state, or local governmental body or to a non-profit organization. MAP shall seek EPA's approval of the potential transferee. If, after using such reasonable efforts, MAP is unable to find such a governmental body or non-profit organization to accept the conveyance, MAP shall notify EPA of this inability by no later than January 15, 2007. If MAP makes that notification, then by no later than March 31, 2007, MAP shall develop the property it owns on Fordson Island for use as a wildlife habitat. Until termination of this First Revised Consent Decree, MAP shall maintain that property for use as a wildlife habitat.

ii. Prior to the Date of Lodging of this First Revised Consent Decree, MAP completed the following activities:

a. Flushed, capped and abandoned MAP's existing hydrocarbon dock lines to the island and rerouted them to an alternate location at a projected cost of $3,100,000;

b. Removed existing MAP industrial equipment on the island at a projected cost of $300,000; and

c. Performed an environmental evaluation of MAP's portion of the island to applicable standards for use of the property as a public park at a cost of approximately $100,000

iii. MAP already has initiated clean up and remediation activities consistent with the requirements of the August 2001 Consent Decree. By no later than December 31, 2006, MAP shall complete clean up and remediation activities in anticipation of the needs of any prospective transferee, provided that the cost of this clean-up work does not exceed $500,000. In the event that MAP determines that the cost of this additional clean-up and remediation will exceed $500,000, MAP shall develop the property as a wildlife habitat.

C. Texas City Sanitation Truck Retrofit Project: By no later than April 1, 2006, MAP shall spend no less than $100,000 so that diesel retrofit technologies are installed on no less than seven high-emitting, in-service heavy duty diesel sanitation trucks owned by Texas City, Texas, in order to reduce emissions of particulates and ozone precursors. MAP will cooperate fully with Texas City, Texas, to implement this project.

D. St. Paul Park Thermal Oxidizer: By December 31, 2002, MAP shall install and operate at the St. Paul Park Refinery a thermal oxidizer for the control of VOC and odors from the St. Paul Park Refinery's wastewater treatment plant at a projected capital cost of $2.5 million dollars, including the piping, foundations, fuel, instrumentation, modification to the contactor covers and oxidizer. MAP shall submit to the MPCA necessary permit applications for the construction of the thermal oxidizer by July 31, 2001. In the event that MPCA does not issue the permit to construct and operate by December 31, 2001, the deadline for installation and operation shall be extended by the time that MPCA's permit issuance exceeds December 31, 2001.

E. In the event that MAP is unable to undertake any of these supplemental environmental projects, MAP shall propose to EPA alternative projects for EPA's approval or shall submit to

EPA a cash penalty in the amount set forth in the paragraph relating to the project that is not undertaken within thirty (30) days of giving EPA notice that the project will not be undertaken.

30. By signing this First Revised Consent Decree, MAP certifies that it is not required, and has no liability under any federal, state or local law or regulation or pursuant to any agreements or orders of any court, to perform or develop any of the projects identified in Paragraph 29. MAP further certifies that it has not applied for or received, and will not in the future apply for or receive (1) credit as a Supplemental Environmental Project or other penalty offset in any other enforcement action for such projects, or (2) credit for any emissions reductions resulting from such projects in any federal, state or local emissions trading or early reduction program.

31. The Progress Report required by Paragraph 33 of the August 2001 Consent Decree or this First Revised Consent Decree for the period in which each project identified in Paragraph 29 is completed shall contain the following information with respect to such projects:

i. A detailed description of each project as implemented;

ii. A brief description of any significant operating problems encountered, including any that had an impact on the environment, and the solutions for each problem;

iii. Certification that each project has been fully implemented pursuant to the provisions of the August 2001 Consent Decree or this First Revised Consent Decree (as applicable); and

iv. A description of the environmental and public health benefits resulting from implementation of each project (including quantification of the benefits and pollutant reductions, if feasible).

32. MAP agrees that in any public statements regarding the funding of these SEPs, MAP must clearly indicate that these projects are being undertaken as part of the settlement of an enforcement action for alleged Clean Air Act violations.

VIII. REPORTING AND RECORDKEEPING

33. MAP will submit to EPA and the applicable Plaintiff-Intervenor semi-annually on January 31 and July 31 until termination of this First Revised Consent Decree a progress report for each of the Covered Refineries. Each report will contain, for the relevant Covered Refinery, the following:

i. progress report on the implementation of the requirements of Section V (Affirmative Relief/Environmental Projects) at the relevant Covered Refinery;

ii. a table – in the same form as Appendix R to this First Revised Consent Decree – that reports (a) the emission rate of SO_2, CO, NO_X and PM, as applicable, for each emissions unit in pounds/hour (lbs/hr) and tons/month (*e.g.*, FCCUs, heaters and boilers, sulfur recovery plants) for each month of the six month period covered by the report; (b) a summary of the refinery-wide monthly emission rate (in lbs/hr and tons/month); and (c) the basis for each emission rate (*i.e.*, CEMs, stack tests or emission factors);

iii. an identification of any exceedance(s) of the emission limits required or established by Section V of this First Revised Consent Decree for the six (6) month period covered by the report;

iv. a description of any problems anticipated with respect to meeting the requirements of Section V of this First Revised Consent Decree at the relevant Covered Refinery;

v. a description of the status of all Supplemental Environmental Projects and Beneficial Environmental Projects (if any) being conducted at the Covered Refinery;

vi. any such additional matters as MAP believes should be brought to the attention of EPA and the Applicable Plaintiff-Intervenor.

The report will be certified by either the person responsible for environmental management at the appropriate Covered Refinery or by a person responsible for overseeing implementation of this Decree across MAP as follows:

> I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

IX. CIVIL PENALTY

34. Within thirty (30) days of the Date of Entry of the August 2001 Consent Decree, MAP paid a civil penalty of $3,800,000 as follows: 1) $3,700,000 to the United States Treasury; 2) $50,000 to the Louisiana Department of Environmental Quality; and 3) $50,000 to the Minnesota Pollution Control Agency.

Payment of monies to the United States shall be made by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number 90-5-2-1-07247 and the civil action

case name and case number of the Eastern District of Michigan. The costs of such EFT shall be MAP's responsibility. Payment shall be made in accordance with instructions provided to MAP by the Financial Litigation Unit of the U.S. Attorney's Office for the Eastern District of Michigan. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. MAP shall provide notice of payment, referencing the USAO File Number and DOJ Case Number 90-5-2-1-07247 and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 83 (Notice).

Payment of the civil penalty owed to the State of Louisiana under this Paragraph shall be made by certified check made payable to the Louisiana Department of Environmental Quality and sent to Darryl Serio, Fiscal Director, Office of Management and Finance, LDEQ, P.O. Box 82263, Baton Rouge 70804-2263.

Payment of the civil penalty owed to the State of Minnesota under this Paragraph shall be made by certified check made payable to Minnesota Pollution Control Agency and sent to Enforcement Penalty Coordinator, Minnesota Pollution Control Agency, 520 Lafayette Road, St. Paul, Minnesota 55155-4194.

35. The civil penalty set forth herein is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and, therefore, MAP shall not treat this penalty payment as tax deductible for purposes of federal, state, or local law.

36. Upon the Date of Entry of the August 2001 Consent Decree, the August 2001 Consent Decree and the First Revised Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Federal Rule of Civil Procedure 69, the Federal Debt Collection Procedure Act, 28 U.S.C. §§ 3001-3308, and other applicable federal authority. The United States shall be deemed a judgment creditor for purposes of collection of any unpaid amounts of the civil and stipulated penalties and interest.

X. STIPULATED PENALTIES

37. MAP shall pay stipulated penalties to the United States for each failure by MAP to comply with the terms of this First Revised Consent Decree as provided herein. The stipulated penalties shall be calculated in the following amounts specified in Paragraphs 38 through 50.

38. **Paragraph 12 - Requirements for NOx and CO Emission Reductions from FCCUs.**

A. For failure to install the NOx control technologies at the Texas City, Robinson, and Catlettsburg FCCUs as required by this First Revised Consent Decree, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day	$5000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

B. For failure to use NOx Reducing Catalyst Additives as required by Paragraph 12 of the First Revised Consent Decree, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1000
31st through 60th day after deadline	$1500
Beyond 60th day after deadline	$2000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

C. For failure to meet any emissions limit proposed by MAP or established by EPA (final or interim) for NOx and CO pursuant to Paragraph 12, per day, per unit: $750 for each calendar day on which the specified 3-hour rolling average exceeds the applicable limit; and $2500 for each calendar day on which the specified 365-day rolling average exceeds the applicable limit.

D. For failure to prepare and/or submit written deliverables required by Paragraph 12, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$200
31st through 60th day after deadline	$500
Beyond 60th day after deadline	$1000

E. For failure to install NOx CEMS, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1000
Beyond 60th day after deadline	$2000 or an amount equal to 1.2 times economic benefit of delayed compliance, whichever is greater.

39. **Paragraph 13 -- Requirements for NOx Emission Reductions Heaters/Boilers.**

A. For failure to install required control technologies by the dates specified in Paragraph 13:

Period of Delay	Penalty per day
1st through 30th day after deadline	$2500
31st through 60th day after deadline	$6000
Beyond 60th day after deadline	$10,000 or an amount equal economic benefit of MAP's delayed compliance, whichever is greater

B. For failure to source test emissions on a controlled heater and boiler, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$450
31st through 60th day after deadline	$1000
Beyond 60th day after deadline	$2000

C. For failure to install CEMS or parametric emission monitoring system on a controlled heater or boiler by the required deadline, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$450
31st through 60th day after deadline	$1000
Beyond 60th day after deadline	$2000 or an amount equal to 1.2 times the economic benefit of delayed compliance whichever is greater.

D. For failure to submit the written deliverables required by Paragraph 13, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$200
31st through 60th day after deadline	$500
Beyond 60th day	$1000

40. **Paragraph 14 - Requirements for SO_2 Emission Reductions from FCCUs.**

A. For failure to install each application of a wet gas scrubber at Texas City as required by this First Revised Consent Decree, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day after deadline	$5000 or an amount equal to 1.2 times the economic benefit of the delayed compliance whichever is greater

B. For failure to use SO_2 adsorbing catalyst additive during the demonstration period as required by Paragraph 14 of the First Revised Consent Decree, at each unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1000
31st through 60th day after deadline	$1500
Beyond 60th day	$2000 or an amount equal to 1.2 times the economic benefit of the delayed compliance whichever is greater

C. [Omitted.]

D. For failure to meet emission SO_2 limits proposed by MAP or established by EPA (final or interim) pursuant to Paragraph 14, per day, per unit: $1500 for each calendar day on which the specified 7-day rolling average exceeds the applicable limit; $3000 for each calendar day on which the specified rolling average exceeds the applicable limit.

41. **Paragraph 15 - Requirements for SO_2 and PM Emission Reductions from Heaters and Boilers.**

A. For failure to cease fuel oil burning by each date specified in Paragraph 15.A of this First Revised Consent Decree, per refinery, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1750
Beyond 31st day	$5000

41.A.i. For failure to comply with the requirements of Paragraph 15.B.ii., the greater of:

a.

Period of Non-Compliance	Penalty per Day
1 - 30 Days	$ 400
31 - 60 Days	$1000
Over 60 Days	$2000

or

b. 1.2 times the economic benefit of non-compliance.

A failure to comply with the plantwide annual sulfur dioxide emissions limitation set forth in Paragraph 26.L. (which is incorporated into Paragraph 15.B.ii) shall have the stipulated penalty set forth in Paragraph 26.L and not the stipulated penalty of this Paragraph 41.A.i.

B. For burning any refinery fuel gas that contains hydrogen sulfide in excess of 0.1 grains per dry standard cubic foot on a 3-hour rolling average at any fuel gas combustion device as specified in Paragraph 15.C of this First Revised Consent Decree, per refinery, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$5000
Beyond 31st day	$7500

C. For failure to submit the written deliverables to EPA pursuant to this Paragraph 15 per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$200
31st through 60th day after deadline	$500
Beyond 60th day	$1000

D. For failure to meet PM emission limits set forth in Paragraph 15.E, per day, per unit: $750 for each calendar day on which the specified 24-hour rolling average exceeds the applicable limit; $2500 for each calendar day on which the specified 365-day rolling average exceeds the applicable limit.

42. **Paragraph 16 - Requirements for Particulate Matter Emission -- FCCU Controls**

A. For failure to install each ESP, third stage separator, or equivalent technology as required by Paragraph 16 of this First Revised Consent Decree within the specified time frame, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day after deadline	$5000 or an amount equal to 1.2 times the economic benefit of the delayed compliance whichever is greater

B. For failure to meet total particulate emissions for each FCCU exhaust gas at each refinery, per day, per unit until compliance is demonstrated: $3000

43. **Paragraph 17 -- Hydrocarbon Flaring/ NSPS Applicability - Flares**

A. For failure to perform root cause analysis and submit written report for those Hydrocarbon Flaring Incidents which exceed 500 lbs sulfur dioxide above permitted values as reflected in Paragraph 17.A of this First Revised Consent Decree:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 500 per day per incident
31st through 60th day after deadline	$1,500 per day per incident
Beyond 60th day after deadline	$2,000 per day per incident

B. For failure to meet date for achieving NSPS compliance for those flaring devices reflected in Appendix J of this First Revised Consent decree:

Period of Delay	Penalty per day
1st through 30th day after deadline	$ 500 per day
31st through 60th day after deadline	$1,500 per day
Beyond 60th day after deadline	$2,000 per day

44. **Paragraph 18 - Requirements for Benzene Waste NESHAP Program Enhancements**

For each violation in which a frequency is specified in Paragraph 18, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth consecutive, continuing period of violation. For requirements where no frequency is specified, penalties will not be doubled.

A. For failure to complete the BWN Compliance Review and Verification Reports as required by Paragraph 18.C.ii and C.iii:

$7,500 per month, per refinery

B. For failure to implement the actions necessary to correct non-compliance as required by Paragraph 18.D:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day	$5000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

C. For failure to install or operate secondary carbon canisters as required by Paragraph 18.E.i:

$5,000 per week, per carbon canister:

D. For failure to conduct required breakthrough monitoring on carbon canisters, or for failure to monitor for breakthrough on carbon canisters during actual flow:

$1,000 per monitoring event, per refinery.

E. For failure to replace carbon canisters where both primary and secondary carbon canisters are utilized immediately upon detection of the breakthrough:

$1,000 per day, per carbon canister

F. For failure to conduct each lab audit required in Paragraph 18.G:

$5,000 per month, per audit

G. For failure to implement the training requirements of Paragraph 18.I:

$10,000 per quarter, per refinery

H. For failure to submit or maintain any records or materials required by Paragraphs 18.E and 18.J of this First Revised Consent Decree:

$2,000 per record or submission

I. For failure to install controls on waste management units handling organic wastes as required by Paragraph 18.J.ii:

$10,000 per month, per waste management unit

J. For failure to conduct sampling in accordance with the sampling plans required by Paragraphs 18.K., 18.L., or 18.M:

$5,000 per week, per stream, or $30,000 per quarter, per stream, whichever is greater, but not to exceed $150,000 per quarter per refinery

K. For failure to submit the plan or retain the third-party contractor required by Paragraphs 18.K.vii, 18.K.viii, 18.L.i, 18.M.v., and 18.M.vi:

$10,000 per month, per refinery

L. For failure to comply with the miscellaneous compliance measures set forth in Paragraph 18.N.ii, as follows:

For N.ii.a, monthly visual inspections: $500 per drain not inspected;

For N.ii.b, identify/mark segregated stormwater drains: $1,000 per week per drain;

For N.ii.c, weekly monitoring of vents: $500 per vent not monitored;

For N.ii.d, quarterly monitoring of oil/water separators: $5,000 per separator not monitored;

M. For failure to complete the study required by Paragraph 18.O.ii:

$2,000 per month

N. For failure to submit the written deliverables required by Paragraph 18.P:

$1,000 per week, per report

O. If it is determined through an EPA, State, or local investigation that MAP has failed to include all benzene containing waste streams in its TAB calculation submitted pursuant to Paragraphs 18.C.ii or 18.C.iii, MAP shall pay the following per waste stream:

Period of Delay	Penalty per day
for waste streams < 0.03 Mg/yr	$250
for waste streams between 0.03 and 0.1 Mg/yr	$1000
for waste streams between 0.1 and 0.5 Mg/yr	$5,000
for waste streams > 0.5 Mg/yr	$10,000

45. **Paragraph 19 - Requirements Benzene Measures at the Detroit and Texas City Refineries:**

A. For discontinuing the use of closed-vent systems ("CVS") and control devices without complying with Paragraph 19.A.ii:

$1000 per week, per CVS or control device (as applicable)

B. For failure to submit a description of new waste management units in organic benzene waste service or take actions to comply with Subpart FF for those new units, as required in Paragraph 19.A.iii.d:

$1,000 per week

C. For failure to install the controls on waste management units as required by Paragraphs 19.A.iii.c and 19.A.iv.c

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day	$5000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

D. For making a false certification under Paragraph 19.A.v, $27,500.

E. For failure to perform activities to complete the requirements of Paragraph 19.A, as required in Paragraph 19.A.v:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day	$5000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

F. For failure to retain a third-party consultant as required by Paragraph 19.B.i:

$1000 per week

G. For failure to submit the Investigation and Action Plans as required by Paragraphs 19.B.ii and iii:

$1000 per week, per plan

H. For failure to implement any part of the approved plan for minimizing benzene as required by Paragraph 19.B.iv:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day	$5000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

46. **Paragraph 20 - Requirements for Leak Detection and Repair Program Enhancements**

For each violation in which a frequency is specified in Paragraph 20, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth consecutive, continuing period of violation. For requirements where no frequency is specified, penalties will not be doubled.

A. For failure to implement the training programs specified in Paragraph 20.B:

$10,000 per month, per program, per refinery

B. For failure to conduct any of the audits described in Paragraph 20.C:

$5,000 per month, per audit

C. For failure to implement any actions necessary to correct non-compliance as required in Paragraph 20.D:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1250
31st through 60th day after deadline	$3000
Beyond 60th day	$5000 or an amount equal to 1.2 times the economic benefit of MAP's delayed compliance, whichever is greater

D. For failure to initiate an internal leak rate definition as specified in Paragraph 20.E:

$10,000 per month per process unit

E. For failure to implement the first attempt repair program in Paragraph 20.G or for failure to implement the QA/QC procedures described in Paragraph 20.J:

$10,000 per month, per refinery

F. For failure to implement the more frequent monitoring program required by Paragraph 20.H.ii:

$10,000 per month, per unit

G. For failure to designate an individual as accountable for LDAR performance as required in Paragraph 20.K, or for failure to implement the maintenance tracking program in Paragraph 20.L, or for failure to write a LDAR program that meets the requirements of Paragraph 20.A:

$3,750 per week, per refinery

H. For failure to use dataloggers or maintain electronic data as required by Paragraph 20.I.:

$5,000 per month, per refinery

I. For failure to conduct the calibration drift assessments or remonitor valves and pumps based on calibration drift assessments in Paragraph 20.M:

$100 per missed event per refinery

J. For failure to repair valves and pumps based on the delay of repair standards in Paragraph 20.N:

$5,000 per valve or pump

K. For failure to submit the written deliverables required by Paragraph 20.O:

$1,000 per week per report

L. If it is determined through an EPA, State, or local investigation (rather than MAP discovering it through monitoring or inspections) that MAP has failed to include all valves and pumps in its LDAR program, MAP shall pay $175 per component that it had failed to include.

M. For failure to timely implement the monitoring program under Paragraph 20.H:

$5,000 per week, per unit

47. **Paragraph 21 - NSPS Applicability Re: Sulfur Recovery Plant**

A. For failure to satisfy a requirement of the Consent Decree to re-route all sulfur pit emissions from Canton, Catlettsburg, Detroit ("C Train") and St. Paul Park to the Sulfur Recovery Plant or Thermal Oxidizer per day, per Sulfur Recovery Plant:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1000
31st through 60th day after deadline	$1750
Beyond 60th day after deadline	$4000 or an amount equal to 1.2 times the amount of delayed compliance whichever is greater.

B. For failure to comply with the NSPS Subpart J emission limit or other emission limit established in Paragraph 21 per day on which the specified rolling average exceeds the applicable limit, per day:

Period of Delay	Penalty per day
1st through 30th day	$1500
31st through 60th day	$2000
Beyond 60th day	$2500

C. For failure to install TGU (or equivalent technology or practice) and install CEMs, as specified in Paragraph 21.B at each refinery, per day, per unit:

Period of Delay	Penalty per day
1st through 30th day after deadline	$2000
Beyond 31st day after deadline	$3000
Beyond 60th day after deadline	$5000 or 1.2 times the economic benefit of delayed compliance, whichever is greater;

D. For failure to conduct optimization studies as specified in Paragraphs 21.D, per refinery per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
Beyond 31st day after deadline	$1500
Beyond 60th day after deadline	$2000

E. For failure to develop and comply with the Operation and Scheduled Maintenance Plans as specified in Paragraph 21.C., per Refinery, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
Beyond 31st day after deadline	$1500
Beyond 60th day after deadline	$2000

F. For failure to submit written deliverables to EPA as specified in Paragraph 21.B. for per refinery, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$200
Beyond 31st day after deadline	$500
Beyond 60th day after deadline	$1000

48. **Paragraphs 22 and 21.E - Requirements for Acid Gas and Sour Water Stripper Gas Flaring and Tail Gas Incidents**: MAP shall be liable for stipulated penalties for violations of the requirements of this First Revised Consent Decree as set forth in this paragraph.

A. For Flaring Incidents for which MAP is liable under Paragraphs 22.C., and Tail Gas Incidents under Paragraph 21.E:

Tons Emitted in Flaring Incident	Length of Time from Commencement of Flaring within the Flaring Incident to Termination of Flaring within the Flaring Incident is 3 hours or less	Length of Time from Commencement of Flaring within the Flaring Incident to Termination of Flaring within the Flaring Incident is greater than 3 hours but less than or equal to 24 hours	Length of Time of Flaring within the Flaring Incident is greater than 24 hours
5 Tons or less	$500 per Ton	$750 per Ton	$1,000 per Ton
Greater than 5 Tons, but less than or equal to 15 Tons	$1,200 per Ton	$1,800 per Ton	$2,300 per Ton, up to, but not exceeding, $27,500 in any one calendar day
Greater than 15 Tons	$1,800 per Ton, up to, but not exceeding, $27,500 in any one calendar day	$2,300 per Ton, up to, but not exceeding, $27,500 in any one calendar day	$27,500 per calendar day for each calendar day over which the Flaring Incident lasts

For purposes of calculating stipulated penalties pursuant to this Paragraph 48, only one cell within the matrix shall apply. Thus, for example, for a Flaring Incident in which the Flaring starts at 1:00 p.m. and ends at 3:00 p.m., and for which 14.5 tons of sulfur dioxide are emitted, the penalty would be $17,400 (14.5 x $1,200); the penalty would not be $13,900 [(5 x $500) + (9.5 x $1200)]. For purposes of determining which column in the table set forth in this Paragraph applies under circumstances in which Flaring occurs intermittently during a Flaring Incident, the Flaring shall be deemed to commence at the time that the Flaring that triggers the initiation of a Flaring Incident commences, and shall be deemed to terminate at the time of the termination of the last episode of Flaring within the Flaring Incident. Thus, for example, for Flaring within a Flaring Incident that (i) starts at 1:00 p.m. on Day 1 and ends at 1:30 p.m. on Day 1; (ii) recommences at 4:00 p.m. on Day 1 and ends at 4:30 p.m. on Day 1; (iii) recommences at 1:00 a.m. on Day 2 and ends at 1:30 a.m. on Day 2; and (iv) no further Flaring occurs within the Flaring Incident, the Flaring within the

Flaring Incident shall be deemed to last 12.5 hours -- not 1.5 hours -- and the column for Flaring of "greater than 3 hours but less than or equal to 24 hours" shall apply.

B. For failure to timely submit any report required by Paragraphs 21.E or 22, or for submitting any report that does not conform to the requirements of Paragraphs 21.E or 22:

Period of Delay	Penalty per day
Days 1-30	$800
Days 31-60	$1,600
Over 60 days	$3,000

C. For those corrective action(s) which MAP: (i) agrees to undertake following receipt of an objection by U.S. EPA pursuant to Paragraph 22.B.iii and 21.E; or (ii) is required to undertake following Dispute Resolution, then, from the date of U.S. EPA's receipt of MAP's report under Paragraph 22.B or required by Paragraph 21.E of this First Revised Consent Decree until the date that either (i) a final agreement is reached between U.S. EPA and MAP regarding the corrective action or (ii) a court order regarding the corrective action is entered, MAP shall be liable for stipulated penalties as follows:

i.

Period of Delay	Penalty per day
Days 1-120	$50
Days 121-180	$100
Days 181 - 365	$300
Over 365 Days	$3,000

or

ii. 1.2 times the economic benefit resulting from MAP's failure to implement the corrective action(s).

The decision of whether to demand as a stipulated penalty Alternative (i) or Alternative (ii) shall rest exclusively within the discretion of the United States.

D. For failure to complete any corrective action under Paragraphs 21.E or 22.B.i of this Decree in accordance with the schedule for such corrective action agreed to by MAP or imposed on

MAP pursuant to the Dispute Resolution provisions of this Decree (with any such extensions thereto as to which U.S. EPA and MAP may agree in writing):

Period of Delay	Penalty per day
Days 1-30	$ 1,000
Days 31-60	$ 2,000
Over 60	$ 5,000

49. **Paragraph 23 – Requirements for RCRA Injunctive Measures – Detroit and Robinson**

A. For failure to submit a plan consistent with the requirements of Paragraph 23.A.ii:

Period of Delay	Penalty per day
1st through 30th day	$1000
31st through 60th day	$2500
Beyond 60 days	$5000

B. For failure to maintain records documenting repairs of leaking closure devices on Level 2 hazardous waste containers, as required in Paragraph 23.B:

$2000 per record

C. For failure to characterize whether spent material from carbon canisters is a hazardous waste, as required in Paragraph 23.B:

$5000 per canister

50. **Paragraph 29 - Requirements for SEPs:**

For MAP's failure to perform any one of the SEPs identified in Paragraph 29 in accordance with the EPA-approved schedule, per day, per project:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$2000
Beyond 60th day after deadline	$2500

51. **Requirements for Reporting and Recordkeeping (Section VIII) - Reports Required By Paragraph 33:**

For failure report as required by Section VIII, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$300
31st through 60th day after deadline	$1100
Beyond 60th day	$2000

52. **Requirements to Escrow Stipulated Penalties.** For failure to pay the civil penalty as specified in Section IX of this First Revised Consent Decree, MAP shall be liable for $30,000 per day plus interest on the amount overdue at the rate specified in 28 U.S.C § 1961(a). For failure to escrow stipulated penalties as required by Paragraph 55 of this First Revised Consent Decree, MAP shall be liable for $2,500 per day plus interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a).

53. **Payment of Stipulated Penalties:** MAP shall pay stipulated penalties upon written demand by the United States no later than sixty (60) days after MAP receives such demand. Stipulated penalties shall be paid to the United States in the manner set forth in Section IX (Civil Penalty) of this First Revised Consent Decree. EPA's demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount EPA is demanding for each violation (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based.

54. **Stipulated Penalties Dispute:** Should MAP dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the United States, by placing the disputed amount demanded by the United States in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Section X.iv within the time provided in this Paragraph 54 for payment of stipulated penalties. If the dispute is thereafter resolved in MAP's favor, the escrowed amount plus accrued interest shall be returned to them, otherwise the United States shall be entitled to the

escrowed amount that was determined to be due by the Court plus the interest that has accrued on such amount. The United States reserves the right to pursue any other non-monetary remedies to which it is entitled, including but not limited to, additional injunctive relief for MAP's violations of this First Revised Consent Decree.

XI. INTEREST

55. MAP shall be liable for interest on the unpaid balance of the civil penalty specified in Section IX, and MAP shall be liable for interest on any unpaid balance of stipulated penalties to be paid in accordance with Section X. All such interest shall accrue at the rate established pursuant to 28 U.S.C. § 1961(a) -- i.e., a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of the First Revised Consent Decree. Interest shall be computed daily and compounded annually. Interest shall be calculated from the date payment is due under the First Revised Consent Decree through the date of actual payment. For purposes of this Paragraph 55, interest pursuant to this Paragraph will cease to accrue on the amount of any penalty payment made into an interest bearing escrow account as contemplated by Section IX (Civil Penalty) and Section X (Stipulated Penalties) of the First Revised Consent Decree. Monies timely paid into escrow shall not be considered to be an unpaid balance under this section.

XII. RIGHT OF ENTRY

56. Any authorized representative of the EPA or an appropriate state agency, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of the facilities of MAP's Refineries as identified herein, at any reasonable time for the purpose of monitoring compliance with the provisions of this First Revised Consent Decree, including inspecting plant equipment, and inspecting and copying all records maintained by MAP required by this First Revised Consent Decree. MAP shall retain such records for the period of the First Revised Consent Decree. Nothing in this First Revised Consent Decree shall limit the authority of EPA to conduct tests and inspections under any statutory or regulatory provision.

XIII. FORCE MAJEURE

57. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this First Revised Consent Decree, MAP shall notify the United States in writing as soon as practicable, but in any event within ten (10) business days of when MAP first knew of the event or should have known of the event by the exercise of due diligence. In this notice, MAP shall specifically reference this Paragraph 57 of this First Revised Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by MAP to prevent or minimize the delay and the schedule by which those measures shall be implemented. MAP shall adopt all necessary measures to avoid or minimize such delays. The notice required by this section shall be effective upon the mailing of the same by certified mail, return receipt requested, to the appropriate EPA Regional Office as specified in Paragraph 83 (Notice).

58. Failure by MAP to substantially comply with the notice requirements of Paragraph 57 as specified above shall render this Section XIII (Force Majeure) voidable by the United States as to the specific event for which MAP has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

59. The United States shall notify MAP in writing regarding its claim of a delay or impediment to performance within thirty (30) days of receipt of the force majeure notice provided under Paragraph 58.

60. If the United States agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of MAP including any entity controlled by MAP and that MAP could not have prevented the delay by the exercise of due diligence, the Parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be filed as a modification to the First Revised Consent Decree pursuant to the modification procedures established in this First Revised Consent Decree. MAP shall not be liable for stipulated penalties for the period of any such delay.

61. If the United States does not accept MAP's claim of a delay or impediment to performance, MAP must submit the matter to the Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with the Court. Once MAP has submitted this matter to the Court, the United States shall have twenty (20) business days to file its response to the petition. If the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of MAP including any entity controlled by MAP and that the delay could not have been prevented by MAP by the exercise of due diligence, MAP shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

62. MAP shall bear the burden of proving that any delay of any requirement(s) of this First Revised Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that they could not have prevented the delay by the exercise of due diligence. MAP shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but does not necessarily, result in an extension of a subsequent compliance date or dates.

63. Unanticipated or increased costs or expenses associated with the performance of the MAP's obligations under this First Revised Consent Decree shall not constitute circumstances beyond its control, or serve as a basis for an extension of time under this Section XIII.

64. Notwithstanding any other provision of this First Revised Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of MAP serving a force majeure notice or the Parties' inability to reach agreement.

65. As part of the resolution of any matter submitted to this Court under this Section XIII, the Parties by agreement, or the Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under the First Revised Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to

by the United States or approved by this Court. MAP shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XIV. RETENTION OF JURISDICTION/DISPUTE RESOLUTION

66. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the First Revised Consent Decree and for the purpose of adjudicating all disputes (including, but not limited to, EPA's determinations under Section V (Affirmative Relief/Environmental Projects (or Measures)) of the First Revised Consent Decree) among the Parties that may arise under the provisions of the First Revised Consent Decree, and until the First Revised Consent Decree terminates in accordance with Paragraph 87 of this First Revised Consent Decree (Termination).

67. The dispute resolution procedure provided by this Section XIV shall be available to resolve all disputes arising under this First Revised Consent Decree, including assertion of commercial unavailability under paragraph 24.C of this First Revised Consent Decree, provided that the party making such application has made a good faith attempt to resolve the matter with the other party.

68. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the Parties to this First Revised Consent Decree to another advising of a dispute pursuant to this Section XIV. The notice shall describe the nature of the dispute, and shall state the noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice and the Parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.

69. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the United States and MAP, unless it is agreed that this period should be extended.

70. In the event that the Parties are unable to reach agreement during such informal negotiation period, the United States shall provide MAP with a written summary of its position

regarding the dispute. The position advanced by the United States shall be considered binding unless, within forty-five (45) calendar days of MAP's receipt of the written summary of the United States' position, it files with the Court a petition which describes the nature of the dispute. The United States shall respond to the petition within forty-five (45) calendar days of filing.

71. In the event, that the United States and the Plaintiff-Intervenors make differing determination or take differing action that affect MAP's rights or obligations under this First Revised Consent Decree the final decisions of the United States shall be binding, unless otherwise modified by the Court.

72. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Section XIV may be shortened upon motion of one of the Parties to the dispute.

73. The Parties do not intend that the invocation of this Section XIV by a party to cause the Court to draw any inferences nor establish any presumptions adverse to either party as a result of invocation of this Section.

74. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this First Revised Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. MAP shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XV. EFFECT OF SETTLEMENT

75. The effect of settlement of this action is governed by this Paragraph 75.

A. **NSR/PSD**: For purposes of Paragraph 75.A, the following statutory and regulatory requirements shall be called "the Applicable NSR/PSD Requirements":

(1) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21;

(2) "Plan Requirements for Non-Attainment Areas" at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7502-7503, and the regulations promulgated thereunder at 40 C.F.R. §§ 51.165 (a) and (b); Title 40, Part 51, Appendix S; and 40 C.F.R. § 52.24; and

(3) Any applicable state regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above.

i. **NOx and SO_2**: With respect to emissions of NOx, and SO_2 from each of MAP's fluidized catalytic cracking units, the Catlettsburg RCCU, and the heaters and boilers at the Covered Refineries, entry of the August 2001 Consent Decree resolved all civil liability of MAP to the United States and the Plaintiff-Intervenors for violations of the Applicable NSR/PSD Requirements that: (1) commenced and ceased prior to the Date of Entry of the August 2001 Consent Decree; or (2) commenced prior to the Date of Entry of the August 2001 Consent Decree and continued until the earlier of December 31, 2003, or the effective date of any PAL for NOx or SO_2 established under Paragraph 26.

ii. **PM and PM_{10}**: At such time as MAP notifies EPA that MAP has agreed to comply with both the PM emission limits established in Paragraph 15.E (for heaters and boilers) and the PM emission limits established in Paragraph 16.B (for fluidized catalytic cracking units), then with respect to emissions of PM and PM_{10} from each of MAP's FCCUs, the Catlettsburg RCCU, and the heaters and boilers at the Covered Refineries, the civil liability of MAP to the United States and the Plaintiff-Intervenors shall be resolved for violations of the Applicable NSR/PSD Requirements that: (1) commenced and ceased prior to date of the notification; or (2) commenced prior to the date of the notification and continued until the earlier of December 31, 2003, or the effective date of any PAL for PM or PM_{10} established under Paragraph 26.

iii. **CO:** At such time as MAP notifies EPA that MAP has agreed to comply with both the CO emission limits established in Paragraph 13.L (for heaters and boilers), and the CO emission limits established in Paragraph 12.K (for FCCUs), then with respect to emissions of CO from each of MAP's fluidized catalytic cracking units, the Catlettsburg RCCU, and the heaters and boilers at

Covered Refineries, the civil liability of MAP to the United States and the Plaintiff-Intervenors shall be resolved for violations of the Applicable NSR/PSD Requirements that: (1) commenced and ceased prior to the date of the notification; or (2) commenced prior to the date of the notification and continued until the earlier of December 31, 2003, or the effective date of any PAL for CO established under Paragraph 26.

iv. **Reservation of Rights:** Notwithstanding the resolution of liability in Paragraphs 75.A.i-iii, nothing in the August 2001 Consent Decree or this First Revised Consent Decree precludes the United States and/or the Plaintiff-Intervenors from seeking from MAP injunctive relief, penalties, or other appropriate relief for violations by MAP of the Applicable NSR/PSD Requirements that: (1) commenced prior to the Date of Entry of the August 2001 Consent Decree for units not covered by the August 2001 Consent Decree or this First Revised Consent Decree; or (2) commence after the Date of Entry of the August 2001 Consent Decree. For purposes of the preceding sentence, all process heaters and boilers that existed at the time of the Lodging of the August 2001 Consent Decree at MAP's seven refineries are "covered" by the August 2001 Consent Decree.

B. **LDAR, Benzene Waste NESHAP, and NSPS at Part 60, Subparts A and J**. With respect to the Covered Refineries, entry of the August 2001 Consent Decree resolved all civil liability of MAP to the United States and the Plaintiff-Intervenors for violations of the following statutory and regulatory requirements that occurred prior to the Date of Entry of the August 2001 Consent Decree:

i. **LDAR.** For all equipment in light liquid service and gas and/or vapor service, the LDAR requirements promulgated pursuant to Sections 111 and 112 of the Clean Air Act, and codified at 40 C.F.R. Part 60, Subparts VV and GGG; 40 C.F.R. Part 61, Subparts J and V; and 40 C.F.R. Part 63, Subparts F, H, and CC;

ii. **Benzene Waste NESHAP**. The National Emission Standard for Benzene Waste Operations, 40 C.F.R. Part 61, Subpart FF, promulgated pursuant to Section 112(e) of the Act, 42 U.S.C. § 7412(e);

iii. **NSPS**. For sulfur recovery plants, the NSPS promulgated pursuant to Section 111 of the CAA, 42 U.S.C. § 7411, and codified at 40 C.F.R. Part 60, Subparts A and J; and for heaters and boilers as fuel gas combustion devices and for fluidized catalytic cracking units catalyst regenerators, 40 C.F.R. Part 60, Subpart J; and

iv. Any applicable state regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above.

v. **Reservation of Rights**. Notwithstanding the resolution of liability in Paragraphs 75.B.i-iv, nothing in the August 2001 Consent Decree or this First Revised Consent Decree precludes the United States and/or Plaintiff-Intervenors from seeking from MAP:

(1) injunctive and/or other equitable relief for violations of Benzene Waste NESHAP and/or LDAR and/or NSPS requirements that (A) commenced prior to the Date of Entry of the August 2001 Consent Decree and continued after the Date of Entry of the August 2001 Consent Decree; or (B) commenced after the Date of Entry of the August 2001 Consent Decree; or

(2) civil penalties for violations of Benzene Waste NESHAP and/or LDAR and/or NSPS occurring on or after the Date of Entry of the August 2001 Consent Decree.

C. **Other.** Entry of the August 2001 Consent Decree resolved all civil liability of MAP to the United States and the Plaintiff-Intervenors for the violations alleged in the Complaint in this matter at Claims Seven through Fourteen and/or the violations alleged in the following Notices of Violation ("NOVs") and Findings of Violation ("FOVs"): NOV No. EPA-5-99-MI-8, dated December 30, 1998 (CAA; Detroit Refinery); FOV No. EPA-5-99-MI-32, dated July 14, 1999 (CAA; Detroit Refinery); NOV No. EPA-5-99-MI-33, dated July 14, 1999 (CAA; Detroit Refinery); NOV No. EPA-5-99-MI-34, dated July 14, 1999 (CAA; Detroit Refinery); FOV No. EPA-5-99-IL-33, dated July 30, 1999 (CAA; Robinson Refinery); NOV dated February 29, 2000, from Lorna M. Jereza, Chief, Compliance Section 1, Enforcement and Compliance Assurance Branch, Waste, Pesticides and Toxics Division, EPA Region 5, to Mike Armbruster, Facility Manager, MAP Robinson Refinery (RCRA; Robinson Refinery). This civil liability shall be resolved through the Date of Entry of the August 2001 Consent Decree.

D. **Reservation Re: NSPS Applicability**: Nothing in the August 2001 Consent Decree or this First Revised Consent Decree shall affect the status of any FCCU, fuel gas combustion device,

or sulfur recovery plant currently subject to NSPS as previously determined by any federal, state, or local authority or any applicable permit.

E. **Audit Policy:** Nothing in the August 2001 Consent Decree or this First Revised Consent Decree is intended to limit or prohibit MAP from utilizing EPA's Audit Policy or any state audit policy for any violations or non-compliance that MAP discovers during the course of any investigation, audit, or enhanced monitoring that MAP is required to undertake pursuant to the August 2001 Consent Decree or this First Revised Consent Decree.

F. **Claim/Issue Preclusion:** In any subsequent administrative or judicial proceeding initiated by the United States or the States for injunctive relief, penalties, or other appropriate relief relating to MAP for violations of the PSD/NSR, NSPS, NESHAP, and/or LDAR requirements, not identified in Paragraph 75 and/or the Complaint:

a. MAP shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, or claim-splitting. Nor may MAP assert, or maintain, any other defenses based upon any contention that the claims raised by the United States or the States in the subsequent proceeding were or should have been brought in the instant case. Nothing in the preceding sentences is intended to affect MAP's ability to assert that the claims are deemed resolved by virtue of Paragraph 75 of the August 2001 Consent Decree or Paragraph 75 of this First Revised Consent Decree.

b. The United States and Plaintiff-Intervenor States may not assert or maintain that the August 2001 Consent Decree of this First Revised Consent Decree constitutes a waiver or determination of, or otherwise obviates, any claim or defense whatsoever, or that the August 2001 Consent Decree or this First Revised Consent Decree constitutes acceptance by MAP of any interpretation or guidance issued by EPA related to the matters addressed in the August 2001 Consent Decree or this First Revised Consent Decree.

G. **Imminent and Substantial Endangerment.** Nothing in the August 2001 Consent Decree or this First Revised Consent Decree shall be construed to limit the authority of the United States to undertake any action against any person, including MAP, to abate or correct conditions

which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

XVI. GENERAL PROVISIONS

76. **Other Laws**: Except as specifically provided by this First Revised Consent Decree, nothing in this First Revised Consent Decree shall relieve MAP of its obligation to comply with all applicable Federal, state and local laws and regulations. Subject to Paragraph 75, nothing contained in this First Revised Consent Decree shall be construed to prevent or limit the United States' rights to seek or obtain other remedies or sanctions available under other Federal, state or local statutes or regulations, by virtue of MAP's violation of the First Revised Consent Decree or of the statutes and regulations upon which the First Revised Consent Decree is based, or for MAP's violations of any applicable provision of law, other than the specific matters resolved herein. This shall include the United States' right to invoke the authority of the Court to order MAP's compliance with this First Revised Consent Decree in a subsequent contempt action.

77. **Failure of Compliance:** The United States does not, by its consent to the entry of First Revised Consent Decree, warrant or aver in any manner that MAP's complete compliance with the First Revised Consent Decree will result in compliance with the provisions of the CAA, 42 U.S.C. §§ 7401-7671q or RCRA, 42 U.S.C. §§ 6901-6992k, or EPCRA, 42 U.S.C. §§ 11001-11050. Notwithstanding EPA's review or approval by the United States of any plans, reports, policies or procedures formulated pursuant to the First Revised Consent Decree, MAP shall remain solely responsible for compliance with the terms of the First Revised Consent Decree, all applicable permits, all applicable Federal, state and local regulations, and except as provided in Section XIII (Force Majeure).

78. **Service of Process:** MAP hereby agrees to accept service of process by mail with respect to all matters arising under or relating to the First Revised Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to, service of a summons. The

persons identified by MAP at Paragraph 83 (Notice) are authorized to accept service of process with respect to all matters arising under or relating to the First Revised Consent Decree.

79. **Post-Lodging/Pre-Entry Obligations:** Obligations of MAP under the provisions of the August 2001 Consent Decree to perform duties scheduled to occur after the Date of Lodging of the August 2001 Consent Decree, but prior to the Date of Entry of the August 2001 Consent Decree, shall be legally enforceable from the Date of Entry of the August 2001 Consent Decree. Liability for stipulated penalties, if applicable, shall accrue for violation of such obligations and payment of such stipulated penalties may be demanded by the United States as provided in the August 2001 Consent Decree, provided that stipulated penalties that may have accrued between the Date of Lodging of the August 2001 Consent Decree and the Date of Entry of the August 2001 Consent Decree may not be collected by the United States until after August 30, 2001.

80. **Costs**: Each party to this action shall bear its own costs and attorneys' fees.

81. **Public Documents**: All information and documents submitted by MAP to the United States pursuant to this First Revised Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential by MAP in accordance with 40 C.F.R. Part 2.

82. **Public Notice and Comment:**: The Parties agree to the First Revised Consent Decree and agree that the First Revised Consent Decree may be entered upon compliance with the public notice procedures set forth at 28 C.F.R. § 50.7, and upon notice to this Court from the U.S. Department of Justice requesting entry of the First Revised Consent Decree. The United States reserves the right to withdraw or withhold its consent to the First Revised Consent Decree if public comments disclose facts or considerations indicating that the First Revised Consent Decree is inappropriate, improper, or inadequate. Further, the Parties agree and acknowledge that final approval by Plaintiff-Intervenor the State of Louisiana, Department of Environmental Quality, and State of Louisiana's participation is subject to the requirements of La. R.S. 30:2050.7, which provides for public notice of this First Revised Consent Decree in newspapers of general circulation and the official journals of parishes in which the Garyville, Louisiana facility is

located, an opportunity for public comment, consideration of any comments, and concurrence by the State Attorney General.

83. **Notice/Approvals**.

A. Notice: Unless otherwise provided herein, notifications to or communications with the United States or MAP shall be deemed submitted on the date they are postmarked and sent by U.S. Mail, postage pre-paid, except for notices under Section XIII (Force Majeure) and Section XIV (Retention Jurisdiction/Dispute Resolution) which shall be sent by overnight mail or by certified or registered mail, return receipt requested. Each report, study, notification or other MAP communication shall be submitted as specified in this First Revised Consent Decree, with copies to EPA Headquarters and/or the appropriate EPA Region and State. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this First Revised Consent Decree to be submitted or delivered to the United States, EPA, the States, MAP shall be addressed as follows:

As to the United States:

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611

Express Mail: to be used only for dispute resolution or emergency or express mail:

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
1425 New York Ave. NW – Rm. 12069
Washington, DC 20005

As to EPA:

U.S. Environmental Protection Agency
Director, Civil Enforcement
c/o Matrix Environmental and Geotechnical Services
East Hanover, NJ 07936

and an electronic copy to:
neichlin@matrixcengineering.com

EPA Region 4:

Director
Air, Pesticides and Toxics Management Division
U.S. EPA, Region 4
61 Forsyth Street (4APTMD-AEEB)
Atlanta, Georgia 30303

EPA Region 5:

Air and Radiation Division
U.S. EPA, Region 5
77 West Jackson Blvd. (AE-17J)
Chicago, IL 60604
Attn: Compliance Tracker

And

Office of Regional Counsel
U.S. EPA, Region 5
77 West Jackson Blvd. (C-14J)
Chicago, IL 60604

EPA Region 6:

Director, Compliance Assurance and
Enforcement Division
Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

The State of Louisiana:

Administrator
Enforcement Division
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312

The State of Minnesota:

Air Quality Compliance Tracking Coordinator
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

As to MAP:

Environmental and Safety Manager
Refining Operations
Marathon Petroleum Company LLC
539 South Main Street
Findlay, Ohio 45840

And

Consent Decree Coordinator
Marathon Petroleum Company LLC
P.O. Box 911
11631 US Route 23 South
Catlettsburg, Kentucky 41129

And

Group Counsel, Environmental, Safety and Security
Law Organization
Marathon Petroleum Company LLC
539 South Main Street
Findlay, Ohio 45840

Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

84. **Approvals**: All EPA approvals or comments required under this Decree shall come from EPA in writing. All Plaintiff-Intervenor approvals shall be sent from the offices identified in Paragraph 83.

85. **The Paperwork Reduction Act**: The information required to be maintained or submitted pursuant to this First Revised Consent Decree is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501 et seq.

86. **Modification**. This First Revised Consent Decree contains the entire agreement of the Parties and will not be modified by any prior oral or written agreement, representation or understanding. Prior drafts of the First Revised Consent Decree will not be used in any action

involving the interpretation or enforcement of the First Revised Consent Decree. Non-material modifications to this First Revised Consent Decree will be effective when signed in writing by EPA and MAP. The United States will file non-material modifications with the Court on a periodic basis. For purposes of this Paragraph, non-material modifications include but are not limited to modifications to the frequency of reporting obligations and modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment or the completion of a catalyst additive program, provided that such changes are agreed upon in writing between EPA and MAP. Material modifications to this Consent Decree will be in writing, signed by EPA, the applicable Plaintiff-Intervenor, and MAP, and will be effective upon approval by the Court.

XVII. TERMINATION

87. A. Certification of Completion: Applicable Subsections. Prior to moving for termination under Paragraphs 87.E or 87.F, MAP may seek to certify, as to a particular Covered Refinery, completion of one or more of the following Paragraphs of the First Revised Consent Decree applicable to that Refinery:

i. Paragraphs 12, 14, 16 - Fluid Catalytic Cracking Units (including operation of the unit for one year after completion in compliance with the emission limits established pursuant to the First Revised Consent Decree);

ii. Paragraphs 13, 15 – Heaters and Boilers (including operation of the relevant units for one year after completion in compliance with the emission limit set pursuant to the First Revised Consent Decree);

iii. Section VII – Supplemental Environmental Projects.

B. Certification of Completion: MAP Actions. If MAP concludes that any of the Paragraphs of the First Revised Consent Decree identified in Paragraph 87.A. have been completed for any one of the Covered Refineries, MAP may submit a written report to EPA and the applicable Plaintiff-Intervenor describing the activities undertaken and certifying that the applicable Paragraph(s) have been completed in full satisfaction of the requirements of this First Revised Consent Decree, and that MAP is in substantial and material compliance with all of the other

requirements of this First Revised Consent Decree. The report will contain the following statement, signed by a responsible corporate official of MAP:

> To the best of my knowledge, after appropriate investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

C. Certification of Completion: EPA Actions. Upon receipt of MAP's certification, EPA, after opportunity for comment by the applicable Plaintiff-Intervenor, will notify MAP whether the requirements set forth in the applicable Paragraph have been completed in accordance with this First Revised Consent Decree. The parties recognize that ongoing obligations under such Paragraphs remain and necessarily continue (*e.g.*, reporting, recordkeeping, training, auditing requirements), and that MAP's certification is that it is in current compliance with all such obligations.

i. If EPA concludes that the requirements have not been fully complied with, EPA will notify MAP as to the activities that must be undertaken to complete the applicable Paragraph of the First Revised Consent Decree. MAP will perform all activities described in the notice, subject to its right to invoke the dispute resolution procedures set forth in Section XV (Dispute Resolution).

ii. If EPA concludes that the requirements of the applicable Subsection have been completed in accordance with this First Revised Consent Decree, EPA will so certify in writing to MAP. This certification will constitute the certification of completion of the applicable Paragraph for purposes of this First Revised Consent Decree.

D. Certification of Completion: No Impediment to Stipulated Penalty Demand. Nothing in Paragraphs 87.A - C will preclude the United States from seeking stipulated penalties for a violation of any of the requirements of the First Revised Consent Decree regardless of whether a Certification of Completion has been issued under Paragraph 87.C of the First Revised Consent Decree. In addition, nothing in Paragraph 87.C. will permit MAP to fail to implement any ongoing obligations under the First Revised Consent Decree regardless of whether a Certification of Completion has been issued under Paragraph 87.C.ii. of the First Revised Consent Decree.

E. Termination: Conditions Precedent. This First Revised Consent Decree will be subject to termination as to the requirements applicable to any one Covered Refinery or as to the entire First Revised Consent Decree upon motion by the applicable Parties or upon motion by MAP acting alone under the conditions identified in Paragraph 87.F. Prior to seeking termination as to the requirements applicable to any one Refinery or as to the entire First Revised Consent Decree, MAP must have completed and satisfied all of the following requirements of this First Revised Consent Decree:

(a) installation of control technology systems as specified in this First Revised Consent Decree with respect to the Refinery in question or with respect to all Refineries (if MAP is moving for termination of the entire Decree);

(b) compliance with all provisions contained in this First Revised Consent Decree with respect to the Refinery in question or with respect to all Refineries (if MAP is moving for termination of the entire First Revised Consent Decree), which compliance may be established for specific parts of this First Revised Consent Decree in accordance with Paragraphs 87.A. - 87.C.

(c) payment of all penalties and other monetary obligations due under the terms of the First Revised Consent Decree; MAP may not move for termination of the requirements applicable to any one Refinery or as to the entire First Revised Consent Decree unless all penalties and/or other monetary obligations owed to the United States or the Plaintiff-Intervenors are fully paid as of the time of the Motion;

(d) completion of the Supplemental/Beneficial Environmental Projects in Section VII that pertain to the Refinery for which termination is sought or, if MAP is moving for termination of the entire First Revised Consent Decree, completion of all Section VII projects;

(e) application for and receipt of permits incorporating the surviving emission limits and standards established under this First Revised Consent Decree as to the Refinery for which termination is sought or as to all Refineries (if MAP is moving for termination of the entire First Revised Consent Decree); and

(f) operation for at least one year of each unit in compliance with the emission limits established herein as to the Refinery for which termination is sought or as to all Refineries (if MAP is moving for termination of the entire First Revised Consent Decree), and certification of such compliance for each unit within the first progress report following the conclusion of the compliance period.

F. Termination: Procedure. At such time as MAP believes that it has satisfied the requirements for termination set forth in Paragraph 87.E. as to one or more Covered Refineries or as to the entire First Revised Consent Decree, MAP will certify such compliance and completion,

in accordance with the certification language of Paragraph 87.B. to the United States and the Plaintiff-Intervenor in writing. Unless, within one-hundred twenty (120) days of receipt of MAP's certification under this Paragraph 87.F., either the United States or a Plaintiff-Intervenor objects in writing with specific reasons, the Court may upon motion by MAP order that this First Revised Consent Decree be terminated as to such Covered Refinery(ies). If either the United States or a Plaintiff-Intervenor objects to the certification by MAP then the matter will be submitted to the Court for resolution under Section XIV (Retention of Jurisdiction/Dispute Resolution) of this First Revised Consent Decree. In such case, MAP will bear the burden of proving that this First Revised Consent Decree should be terminated.

XVIII. SIGNATORIES

88. Each of the undersigned representatives certify that they are fully authorized to enter into the First Revised Consent Decree on behalf of such Parties, and to execute and to bind such Parties to this First Revised Consent Decree.

Dated this _____ day of _____, 200__.

_____
UNITED STATES DISTRICT JUDGE

WE HEREBY CONSENT to the entry of the First Revised Consent Decree in United States, et al. v. Marathon Ashland Petroleum LLC, Civil No. 01-40119, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

KELLY A. JOHNSON
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United States Attorney for the
Eastern District of Michigan

By: _____
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WE HEREBY CONSENT to the entry of the First Revised Consent Decree in United States, et al. v. Marathon Ashland Petroleum LLC, Civil No. 01-40119, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

GRANTA Y. NAKAYAMA
Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
Washington, D.C. 20460

WE HEREBY CONSENT to the entry of the First Revised Consent Decree in United States, et al. v. Marathon Ashland Petroleum LLC, Civil No. 01-40119, subject to the public notice and comment requirements.

FOR PLAINTIFF-INTERVENOR STATE OF MINNESOTA

GORDON E. WEGWART, P.E.
Assistant Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155

WE HEREBY CONSENT to the entry of the First Revised Consent Decree in United States, et al. v. Marathon Ashland Petroleum LLC, Civil No. 01-40119, subject to the public notice and comment requirements.

PRELIMINARY APPROVAL BY PLAINTIFF-INTERVENOR THE STATE OF LOUISIANA, THROUGH THE DEPARTMENT OF ENVIRONMENTAL QUALITY:

HAROLD LEGGETT, Ph.D
Assistant Secretary
Office of Environmental Compliance
Louisiana Department of Environmental Quality

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Attorney II
Office of the Secretary
Legal Affairs Division
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P.O. Box 4302
Baton Rouge, Louisiana 70821-4302

WE HEREBY CONSENT to the entry of the First Revised Consent Decree in United States, et al. v. Marathon Ashland Petroleum LLC, Civil No. 01-40119.

FOR DEFENDANT MARATHON ASHLAND PETROLEUM LLC.

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